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Contents

2 Introduction
   Administration
   Mission Statement
   History
   Accreditation

4 General Information
   Degrees Awarded
   Policies & Procedures
   Honor Code
   Administrative Departments
   Faculty

20 Pre-Nursing
   Admissions Contact
   Program Contact
   Curriculum

21 Pre-Pharmacy
   Admissions Contact
   Program Contact
   Curriculum

22 Clinical Research
   Academic Programs
   Admissions Policies
   Academic Standards
   Curriculum
   Course Descriptions

32 General Sciences
   Academic Programs
   Academic Standards
   Curriculum
   Course Descriptions

34 Nursing
   Academic Programs
   Program Objectives
   Admission Policies
   Academic Standards
   Registered Nurse Licensure Exam
   Requirements
   Curriculum
   Course Descriptions

40 Pharmaceutical Sciences
   Academic Programs
   Admission Policies
   Academic Standards
   Curriculum
   Cooperative Degree Program
   Course Descriptions

50 Pharmacy
   Admission Policies
   Technical Standards for Admission & Matriculation
   Academic Standards
   Matriculation Standards
   Curriculum
   Course Descriptions
   Experiential Training
   Drug Information Center
   Residency Programs
   Post-Baccalaureate Program

71 Physical Therapy
   Academic Program
   Admission Policies
   Policies & Procedures
   Technical Standards for Admission
   Academic Standards
   Curriculum
   Course Descriptions
   Competencies for Graduates

87 Physician Assistant Program
   Academic Program
   Admission Policies
   Financial Information
   Policies & Procedures
   Technical Standards for Admission
   Academic Standards
   Curriculum
   Course Descriptions
   Competencies for Graduates

98 Public Health
   Academic Program
   Admission Policies
   Academic Standards
   Curriculum
   Course Descriptions

102 Dual Degree Programs
Introduction

Administration

Campbell University

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Provost and Vice President, Academic Affairs
Jim Roberts, MPA
Vice President, Business and Treasurer
Dennis Bazemore, MDiv, DMin
Vice President, Student Life
Michael L. Adams, PharmD, PhD
Acting Vice President, Health Programs
Britt Davis, DPA
Vice President, Institutional Advancement and Marketing, Assistant to the President

College of Pharmacy & Health Sciences Administration

Michael L. Adams, PharmD, PhD
Dean
Robert Greenwood, PhD
Associate Dean, Academic Affairs
W. Mark Moore, PharmD, MBA, MS
Associate Dean, Admissions & Student Affairs
Wesley Rich, PhD, MEd, MA
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Betty Lynne W. Johnson, MEd, PA-C
Assistant Dean, Interprofessional Education
Byron May, PharmD
Chair, Department of Pharmacy Practice
Emanuel Diliberto, Jr., PhD
Chair, Department of Pharmaceutical Sciences
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Thomas Colletti, DHCSc, PA-C
Chair, Department of Physician Assistant Practice
David Tillman, PhD, MEd,
Chair, Department of Public Health
Gregory Dedrick, PT, ScD
Director, Physical Therapy Program
Nancy Duffy, DSN
Director, Nursing Program

Mission Statement

Campbell University

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

To fulfill its mission, the University:
• presents a worldview informed by Christian principles and perspectives;
• affirms that truth is revelatory and transcendent as well as empirical and rational, and that all truth finds its unity in Jesus Christ;
• influences development of moral courage, social sensitivity, and ethical responsibility;
• gathers a diverse community of learners;
• delivers academic instruction in the liberal arts and sciences and professional preparation at both undergraduate and graduate levels through traditional, extended campus, and online programs;
• transfers to students the vast body of knowledge and values accumulated over the ages;
• encourages students to think critically and creatively;
• fosters the development of intellectual vitality, physical wellness, and aesthetic sensibility;
• forges a community of learning that is committed to the pursuit, discovery, and dissemination of knowledge;
• provides students with servant leadership opportunities;
• cooperates with other educational institutions to expand learning opportunities for students;
• offers service and other opportunities to the greater community through athletics, continuing education, and cultural enrichment programming.

College of Pharmacy & Health Sciences Administration

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

History

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

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

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

The Campbell University School of Law was founded in 1976, and the Lundy-Fettermann School of Business begun in 1983. The Schools of Pharmacy and Education were established in 1985. The Divinity School was established in 1996. The School of Pharmacy was renamed as the College of Pharmacy & Health Sciences in 2009.

In addition to its main campus in Buies Creek, Campbell University has extended campuses in the Research Triangle Park, Camp Lejeune, Fort Bragg/Pope Air Force Base, and Raleigh, where the law school relocated to in 2009. Since 1979, Campbell has also partnered with Tunku Abdul Rahman College in Kuala Lumpur, Malaysia, to offer a Bachelor of Science degree.
Today, Campbell University enrolls approximately 6,000 students, including 4,000 undergraduate and graduate students on its main campus. They’re studying across nearly 100 disciplines in the liberal arts, health sciences, and professions -- and continuing the university’s tradition of excellence in faith, learning, and service.

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

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

Accreditation

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

Commission on Accreditation in Physical Therapy Education
Gratuation from a physical therapist education program accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE) is necessary for eligibility to sit for the licensure examination, which is required in all states.

Effective November 6, 2013, Campbell University has been granted Candidate for Accreditation status by the Commission on Accreditation in Physical Therapy Education. Candidate for Accreditation is a pre-accreditation status of affiliation with the Commission on Accreditation in Physical Therapy Education that indicates the program is progressing toward accreditation and may matriculate students in technical/professional courses. Candidacy is not an accreditation status nor does it assure eventual accreditation.

Commission on Accreditation in Physical Therapy Education
1111 North Fairfax Street
Alexandria, VA 22314-1488
Phone: 703-706-3245
Email: accreditation@apta.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 2021. The review date is contingent upon continued compliance with the Accreditation Standards and ARC-PA policy.

North Carolina Board of Nursing
The Catherine W. Wood School of Nursing received Initial Approval Status from the North Carolina Board of Nursing (NCBON) in January 2014. The NCBON will return for a second site survey and determine whether the program is in compliance with all rules for nursing programs. We anticipate that the Catherine W. Wood School of Nursing will be receiving Full Approval Status in the spring of 2018.

The Catherine W. Wood School of Nursing will seek professional or specialized accreditation from the Commission on Collegiate Nursing Education (CCNE). The CCNE accreditation evaluation consists of a review of the program’s mission, goals, and expected outcomes; and an assessment of the performance of the program in achieving the mission, goals, and expected outcomes through the most effective utilization of available resources, programs, and administration. Our plan for initial accreditation is to submit a request for New Applicant Status, develop a self-study report and request a CCNE site survey team for fall 2017 or spring 2018.

The Campbell University Catherine W. Wood School of Nursing has been approved for Institutional membership in the American Association of Colleges of Nursing (October 2014).

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

Accreditation Council for Pharmacy Education
20 North Clark Street, Suite 2500
Chicago, IL 6062-5109
Phone: 800-533-3606
Fax: 312-664-4652
www.acpe-accredit.org

Accreditation Review Commission on Education for the Physician Assistant
The Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) has granted Accreditation-Continued status to the Physician Assistant Program sponsored by Campbell University. Accreditation-Continued is an accreditation status granted when a currently accredited program is in compliance with the ARC-PA Standards.

Accreditation remains in effect until the program closes or withdraws from the accreditation process or until accreditation is withdrawn for failure to comply with the Standards. The approximate date for the next validation review of the program by the ARC-PA will be March 2021. The review date is contingent upon continued compliance with the Accreditation Standards and ARC-PA policy.

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The Campbell University Catherine W. Wood School of Nursing has been approved for Institutional membership in the American Association of Colleges of Nursing (October 2014).
General Information

Degrees Awarded
The College of Pharmacy & Health Sciences offers the following degree programs:
- Doctor of Pharmacy
- Doctor of Physical Therapy
- Master of Physician Assistant Practice
- Master of Science in Clinical Research
- Master of Science in Pharmaceutical Sciences
- Master of Science in Public Health
- Bachelor of Science in Clinical Research
- Bachelor of Science in General Sciences
- Bachelor of Science in Nursing
- Bachelor of Science in Pharmaceutical Sciences

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

Graduate and professional students include students enrolled in the following programs:
- Bachelor of Science in Nursing
- Master of Physician Assistant Practice
- Master of Science in Clinical Research
- Master of Science in Pharmaceutical Sciences
- Master of Science in Public Health
- Doctor of Pharmacy
- Doctor of Physical Therapy

Students should contact their program director should questions or concerns arise. Policies and procedures found in this section include:
- Accommodation
- Anti-Hazing
- Attendance
- Complaints/Grievances
- Computers and iPads
- Counseling
- Criminal Background Check & Drug Screen
- Dress Code
- Environmental Health and Safety
- Grade Appeals
- Grade Reports, Records, and Transcripts
- Health Insurance
- Immunization
- Incident Reporting
- Inclement Weather
- Meal Plan
- Parking
- Professional Liability Insurance
- Refund
- Safety and Emergency Preparedness
- Sexual Harassment
- Student Health
- Tuition & Fees
- Withdrawal

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

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

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

Students should also be aware that hazing is a misdemeanor under North Carolina state law. See North Carolina General Statute § 14.35.

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

Attendance
To receive credit for any course, a student must attend at least 80% of the hours prescribed for the course. Individual professors have the prerogative of imposing a more restrictive policy consistent with the following exceptions:
- Absence due to serious illness, injury, or death in the student’s immediate family;
- Authorized representation of the College or University.

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

Complaints/Grievances

General Complaint Procedure
Students have the right to file formal written and signed complaints regarding policies and procedures of the College to the dean’s office. Student complaints will be evaluated by appropriate administrators as referred by the dean.

The written grievance should include the following: student name and contact information; the date of the grievance; and a description of the specific grievance. Students should expect a timely, fair, and comprehensive review of their complaints to include personal discussions with appropriate administrators, and the opportunity to supply supportive documentation or the testimony of
fellow students regarding their complaints. A written response to a student complaint will be provided following review by the College’s Executive Committee. The student’s original complaint and Executive Committee’s response will be kept on file for a period of six years and be subject to review by appropriate accreditation agencies.

Formal Grievance Policy for ACPE Concerns
Students who have concerns regarding the College of Pharmacy & Health Sciences’ capability to achieve the standards of accreditation or comply with policies and procedures of the Accreditation Council for Pharmacy Education (ACPE) may file a grievance with the Office of Admissions & Student Affairs. Formal grievances must be submitted in writing to the associate dean of admissions & student affairs.

The written grievance should include the following: student name and contact information, the date of the grievance, the specific ACPE accreditation standard, policy or procedure that is involved, and a description of the specific grievance.

The grievance will be reviewed by the associate dean of admissions & student affairs and referred to the appropriate administrators for investigation, analysis, and appropriate action. Students should expect a timely, fair, and comprehensive review of their complaints to include personal discussions with appropriate administrators, and the opportunity to supply supportive documentation or the testimony of fellow students regarding their concerns. Students will be notified regarding the outcome of the review and any actions planned or taken.

A record of written grievances regarding the College’s adherence with accreditation standards or related policies and procedures, including the original grievance and administration’s response, will be maintained in the Office of the Dean for review by appropriate accreditation agencies, unless otherwise prohibited by state or federal law. Appropriate information addressed in such grievances will be utilized in the College of Pharmacy & Health Sciences’ assessment, planning, and self-study processes.

The accreditation standards, policies, and procedures for colleges of pharmacy can be found at www.acpe-accredit.org/standards. Students who are not satisfied with the response from the College of Pharmacy & Health Sciences’ administration may submit their grievance directly to the ACPE via the following website: www.acpe-accredit.org/students/complaints.asp or by email at csinfo@acpe-accredit.org.

Computers and iPads
Computers and iPads distributed by the program are considered program property until graduation. Computers and iPads distributed by the program must be used for program related curriculum, emails, and clinical rotations. Program computers and iPads must not be sold. Violation of this policy is considered a breach of professionalism and will result in administrative probation and possible dismissal.

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

Counseling services are also offered through the coordinator for academic support services. For an appointment, call 910-814-5693.

Undergraduate Students
On-campus counseling services are available to undergraduate students in the Avrette House (behind Student Center & Quiznos) Monday – Thursday, 8:30 a.m. – 4:30 p.m. and Friday, 8:30 a.m. – noon. Please contact the Counseling Center Graduate Assistant, at 910-814-5709 or visit www.campbell.edu/student-services/counseling-services/ for additional information. All services are free and confidential.

Criminal Background Check and Drug Screen Policy for Health Professions Programs
Introduction
In order to mitigate risk and protect the safety and well-being of patients, criminal background checks (CBCs) and substance abuse screening tests (SASTs) have evolved into required components of the employment process at most health care facilities. Additionally, CBCs and SASTs may be required prior to licensure to practice by regulatory boards. As a result of these movements, these screens have been incorporated as requirements for health professions students who rotate through health care facilities as part of mandatory clinical educational experiences. The College of Pharmacy & Health Sciences is being asked 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. If health professions students are not eligible for entry to clinical education sites to perform the mandatory clinical training experiences required to complete their degree, they are not eligible for matriculation into the college as a health professions student. Individuals in the clinical research, pharmaceutical sciences or public health programs may be subject to CBCs and SASTs as a component of any experiential requirements.

Beginning in the academic year 2016-2017, the cost of all CBCs and SASTs will be the responsibility of the individual applicant/current student in the Campbell University health professions programs. Prior to Campbell University Health Program students being permitted to participate in experiential education courses, they must submit to updated CDCs and SASTs. Students who:

• do not consent to the required CBC and SAST
• refuse to provide information necessary to conduct these screens in a timely manner and by the required deadlines
• provide false or misleading information or samples in regard to the CBC and SAST

are not eligible to participate in experiential education courses and are subject to sanction up to and including dismissal from the college with due process.

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 IPE Experiential Subcommittee, the Associate Dean for Student Affairs & Admissions 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.
• Health professions students who are refused admission to a clinical training site, or who are asked to leave a site because of information discovered through any CBC and/or SAST will have a plan developed by the IPE Experiential Subcommittee in an attempt to make the student more
acceptable to clinical education sites. Affected students must follow the plan and any evaluation, assessment, treatment and rehabilitation guidelines required in the plan, before and/or during subsequent enrollment in experiential education courses. The requirements of the plan are not subject to appeal. The results of evaluation and the existence of treatment and rehabilitation guidelines imposed by the plan will be disclosed to the human resources office of the clinical training site and/or to the individual preceptor as necessitated by the associated affiliation agreement.

- The College of Pharmacy & Health Sciences does not accept responsibility for any student being ineligible for coursework, 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 plan attempting to make them acceptable to clinical education sites.
- The College of Pharmacy & Health Sciences does not accept responsibility to continually seek clinical education sites who will accept health professions students previously denied access to any assigned site.

**Criminal Background Check Policy for Campbell University Health Programs**

The College of Pharmacy & Health Sciences requires criminal background checks of all health professions applicants accepted into their respective health programs prior to matriculation and at a minimum annually thereafter throughout their program of study. Therefore, applicants to any of the Campbell University CPHS Health Programs will be notified of the background check requirement as part of the application/interview process. Failure to disclose any convictions or pending charges may result in reconsideration of an applicant’s admissions status. Current students who fail to disclose new charges or convictions 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.

Students must be willing to disclose and release the required personal information and CBC results in order to participate in clinical education activities. Charges and convictions do not automatically prevent an applicant or current student from matriculating into or continuing in a professional health program within CPHS at Campbell University. Any charges or convictions as described above must be reviewed for potential impact on clinical activities required for the successful completion of the applicable health program and ultimately licensure eligibility. In such cases, the student may not be able to meet the requirements for progression in their program or graduation. Healthcare facilities providing student internships and clinical experiences for Campbell CPHS Health Programs have the right to review all CBC results, and ultimately have the ability to accept or deny the placement of any student based upon these results.

**Procedure**

1. A criminal background check will be completed on all CPHS health program accepted applicants prior to matriculation and on all current students annually or as required by clinical sites.
2. Students 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 test. Results are sent directly from the vendor to the designated program representative for review.
6. Ultimate decisions 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 Campbell University Interprofessional Education (IPE) Experiential Subcommittee.
7. No information derived from a criminal background check will automatically disqualify any accepted applicant from matriculation or prevent progression of a current student. A final decision 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 and the accuracy of the information provided by the applicant in his or her application materials.
8. 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.
9. Information obtained will only be used in accordance with state and federal laws.
10. Due to the potential impact of clinical placements, enrolled students or those currently granted a deferral or alternate course of study are required to self-report any new charges or convictions to the designated program representative within three (3) days.
11. For current students, failure to disclose new criminal charges within three (3) days to the designated program representative may result in program specific action and/or referral to the Student Affairs and Professionalism Committee.
12. 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**

The College of Pharmacy & Health Sciences requires substance abuse screening tests (SASTs) of all applicants accepted into their respective health programs prior to matriculation and at a minimum annually thereafter throughout their program of study. Therefore, applicants to CPHS Health Programs will be notified of the SAST requirement as part of the application/interview process. More frequent screening tests may be required as determined by clinical training sites. Health care facilities providing student internships and clinical experiences for Campbell CPHS health programs have the right to review all SAST results, and ultimately have the ability to accept or deny the placement of any student based upon these results. Students must be willing to disclose and release the required personal information and SAST results in order to participate in clinical education activities.
Procedure:
1. A 14-panel urine substance abuse screening test will be completed at a designated lab facility on all accepted applicants prior to matriculation and current health programs’ students annually with results sent directly to the current Campbell University vendor. (Note: Accepted applicants to the Doctor of Pharmacy program will submit to the standard substance abuse screening test utilized by the PharmCAS system.)
2. The letter sent by the program to each accepted applicant, as well as to selected wait-listed applicants will include information about these requirements with the contingency that the final decision regarding matriculation will be made after institutional review of the accepted applicant’s 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 and current students must have the sample collected at the Campbell University Health Center or 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 Health Program representative for review.
5. Applicants and current students without any abnormal SAST findings can be approved by the Admissions Department or program representative for matriculation or continuation in their respective program.
6. Applicants & current students with abnormal SAST findings must undergo further review by the Campbell University Interprofessional Education Experiential Subcommittee.
   • Applicants/current students with SAST positive results for illegal drugs or non-prescribed controlled substances may have their offer of admission rescinded or be dismissed from their current program.
   • Applicants/current students with a SAST result of “negative dilute”, MUST repeat the SAST at their expense. A second negative dilute result may jeopardize a student’s admission or ability to continue in his/her respective program.

7. Although we acknowledge that marijuana use is legal in several states, it is currently ILLEGAL in North Carolina, and applicants/current students will be held to this standard.

Dress Code
Proper professional attire signal to patients and other health professionals a student’s self-confidence, knowledge level, and willingness to participate in responsible decision making processes. The short-length white lab coat is required for many health care professionals in training.

Business casual attire is appropriate for classroom and examination sessions. Business casual attire for men includes collared shirts and khaki or dress slacks*; for women knee-length skirts or dress slacks with tailored blouses. Closed toe shoes are required for all clinical experiences.

The following dress and accessories are unacceptable in the clinic and classroom: hats, caps, t-shirts, men’s sleeveless shirts, blue jeans, shorts, mini-skirts, visible cleavage, sweat pants, athletic attire, tank tops, bare midriffs, skin tight 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.

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 inappropriate. The following items are never appropriate in any setting:

- Bikini/speedo
- Clothing that exposes breasts
- Pants below hips that expose undergarments
- Any clothing that allows for viewing of undergarments while performing job duties or classroom activities
- Pajamas and slippers

Master of Physician Assistant Practice Laboratory Dress Code
Clean scrubs are recommended for laboratory sessions. A short white lab coat and name tag is required for all clinical encounters; long hair must be pulled back. Nose, lip, and eyebrow piercings are not permitted in clinical settings.

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

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

Environmental Health and Safety
The College of Pharmacy & Health Sciences has the Environmental Health and Safety Committee that is responsible for updating and maintaining the laboratory safety manual to include policy & procedure, safety, training, storage, and disposal of hazardous chemicals. The Lab Safety Manual can be accessed in each program manager’s office. Emergency contact numbers are posted in the administrative offices through the College. Training is supplied and recorded (kept in secure file cabinet in program directors’ offices) for all
faculty, students, and staff who participate in scholarship activities involving hazardous chemicals in laboratories.

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

Grade Reports, Records, and Transcripts
A report of grades attained by a student in the CPHS will be available through the University’s WebAccess system at the end of each semester. The official records of each student in CPHS will be secured in the Office of the Registrar. The Family Educational Rights and Privacy Act (PL93-380) will govern the release of information for this record which contains the transcript from Campbell University, transcripts and transcript evaluations from other educational agencies attended by the student, secondary school transcripts, scholastic aptitude, GRE, and other standardized test scores. The application for admission, general correspondence with the student and, if applicable, letters concerning misconduct or disciplinary actions at Campbell University are kept in the Office of Student Affairs. The transcript and contents of the permanent record may be examined by the student upon appointment with the Registrar, or the associate dean for student 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 students are required to have health insurance coverage. Before registration, students must either provide proof of health insurance or purchase the health insurance available through the University. Any medical costs incurred by students as a result of injury, exposure to infectious diseases or materials, while in training, are the responsibility of the student and his or her health insurance carrier.

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 to Magnus Health. Students are responsible for maintaining immunizations; this is required by CPHS in order to complete all required supervised clinical practice experiences. Prior to registration, students must provide proof of the immunizations/immunity requirements listed below.

Requirements
- Tetanus-diphtheria-pertussis: Td booster within the past 10 years. Students must have a one-time dose of Tdap unless contraindicated. Students must have booster protection across all years enrolled in the program (i.e. lapses in coverage between boosters are unacceptable).
- Polio: Complete IPV or OPV series
- MMR: Two doses or laboratory evidence of immunity to each of the three diseases
- Hepatitis A*: Two-vaccination series required before the end of the first professional year, students must provide documentation of the second dose.
- Hepatitis B: Students must show documentation of a three-dose series with the first of the three doses upon admission to CPHS. Before the end of the first professional year, students must provide documentation of the second and third doses in a series.
- Varicella (chicken pox): Students must either receive the two-series Varicella vaccination or prove immunity to the Varicella virus by a positive (+) blood titer. Individuals utilizing blood titer as proof must submit a copy of the actual lab result. History of “chicken pox” in your medical 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.
*Not required for Physical Therapy coursework

Standard Precautions
The Center of Disease Control (CDC) has developed a list of the following precautions to prevent accidental spread of infectious diseases to both students and patients:
- Hand washing (or using an antiseptic hand rub)
  - After touching blood, body fluids, secretions, excretions, and contaminated items
  - Immediately after removing gloves between patient contact
- Gloves
  - For contact with blood, body fluids, secretions, and contaminated items
  - For contact with mucous membranes and non-intact skin
- Masks, goggles, face masks
  - Protect mucous membranes of eyes, nose, and mouth when contact with blood and body fluids is likely
- Gowns
  - Protect skin from blood or body fluid contact
  - Prevent soiling of clothing during procedures that may involve contact with blood or body fluids
- Linen
  - Handle soiled linen to prevent touching skin or mucous membranes
  - Do not pre-rinse soiled linens in patient care areas
- Patient care equipment
  - Handle soiled equipment in a manner to prevent contact with skin or mucous membranes to prevent contamination of clothing or the environment
  - Clean reusable equipment prior to reuse
- Environmental cleaning
  - Routinely care, clean, and disinfect environment
  - Prevent contamination of clothing or the environment
  - For contact with mucous membranes
  - For contact with non-intact skin
- Sharps
  - Avoid recapping used needles, use self-capping safety needles if available
  - Avoid removing used needles from disposable syringes
  - Avoid bending, breaking, or manipulating used needles by hand
  - Place used sharps in puncture-resistant containers
- Patient resuscitation
  - Use mouthpieces, resuscitation bags, or other ventilation devices to
avoid mouth to mouth resuscitation

- Patient placement
- Place patients who contaminate the environment or cannot maintain appropriate hygiene in private rooms

**OSHA Bloodborne Pathogens Training**
CPHS requires that all students who have contact with patients view the OSHA Bloodborne Pathogens (BBP) training video. Copies of student training records will be kept in the office of each respective professional program.

**Physician Assistant Students Only-Tuberculosis Training**
Physician assistant students will receive training for preventing the transmission of tuberculosis (TB) annually. All students who have the potential for exposure to TB may be fit tested for National Institute of Occupational Safety and Health (NIOSH) certified personal respirator protective devices, as required by clinical sites. These devices are considered personal protective equipment and must be purchased by the student.

**Personal Illness**
Students presenting signs or symptoms of infectious or communicable diseases have a duty not to spread illness to others. Students should consult Student Health Services (910-893-1516), their preceptor, clinical supervisor or the infection control office at the clinical site about the advisability of working with patients and when it is safe to return to patient care.

**Incident Reporting**

**Body Fluid and Needle Stick Policy and Procedure**
Incidents involving needle sticks and exposure to body fluids or potential bloodborne pathogens require immediate action to protect students’ health and safety. If a student sustains a needle stick or is exposed to infectious materials he or she should:

1. Immediately wash exposure site thoroughly with soap and water (or water only for mucous membranes)
   - Wash needle stick and cuts with soap and water
   - Flush the nose, mouth or skin with water
   - Irrigate eyes with clean water, saline or sterile irrigants

2. Notify the preceptor or clinical supervisor at the rotation site for assistance
   - For pharmacy students the preceptor should notify the Office of Experiential Education by phone, 800-760-9697, or email (Jean White ext. 1709/email: white@campbell.edu or Paige Brown ext. 5611/email brownp@campbell.edu) as soon as reasonably possible to begin the process of filing an incident report.
   - 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, and HCV and risk assessment to determine the need for chemoprophylaxis, etc.) or students may be seen at Campbell University’s Student Health Service.

4. The preceptor or appropriate institutional representative should obtain consent from the source patient for appropriate laboratory testing (i.e. HIV, HBV, and HCV status).
   - Students should receive post-exposure prophylaxis within hours of the exposure rather than days, per CDC recommendations, if the status of the source patient is deemed high risk or if there is uncertainty of the source patient’s status.

5. Some clinical sites will provide post-exposure care to students at no charge. When this is not the case, needle sticks and other exposure are covered under the Campbell University Student Accident Insurance Policy. Accidental infectious exposure must be reported as directed in this policy:
   - The accident policy is underwritten by Guarantee Trust Life Insurance Company and administered by First Agency, Inc.

First Agency, Inc.
5071 West H Avenue
Kalamazoo, MI 49009-8501
Phone: 269-381-6630
Fax: 269-381-3055
Web: www.1agency.com

- Policy Number: 324-125-001-O
When presenting to a clinic for post-exposure care, the student may provide the above policy information and his or her student ID card. However, the site may or may not accept direct payment through this plan. Students may have to pay out of pocket at the time of service. However, reimbursement for services up to $5,000 per incident can be filed via Student Health Services. Students will need:
   - To provide an itemized statement complete with diagnosis and procedure codes
   - Complete a claim form either in person, or call Student Health Services at 910-893-1560. The staff will be glad to help you fill out the form by email correspondence.
   - Student Health Services personnel will provide further instruction on how to complete and file your claim.
   - If requested, mail documents to:
     Campbell University Student Health Service
     PO Box 565
     Buies Creek, NC 27506

Students may opt to use their personal health insurance to cover the cost of post-exposure care in lieu of using the Campbell University Student Accident Insurance Policy.

6. Although, the preceptor or clinical supervisor may have contacted CPHS as indicated above, the student must also contact the Office of Experiential Education or the Physician Assistant Department Office as soon as reasonably possible but within a minimum of 72 hours of the exposure to finalize the incident report.
   - The incident report shall contain:
     - The date and time of exposure
     - Clinical site, location and unit information
     - Details of how the exposure occurred
     - Details of the type and severity of the exposure
     - Details about the source patient (i.e. post-exposure management, previous vaccinations, current HIV, HBV, HCV status)
   - The Office Experiential Education or the Physician Assistant Department Office will provide a copy of the incident report to Student Health Services. This will alert the Student Health Services in the event that an accident insurance claim needs to be filed.
   - In the event that an incident report was filed at the rotation site, a copy of this must be sent to the Office of Experiential
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
Non-residential students have the option to purchase a declining balance meal plan. Students pay for the plan in advance at the Campbell University Business Office to have funds placed on their declining balance account. This account may be used at Marshbanks Dining Hall, Shouse Dining Hall, Oasis Grill, Chick-fil-A, Moe’s Southwest Grill, Papa Johns, Jole Mole, Starbucks, and the Groc. Students residing on campus

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

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

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

In the event of a student’s complete withdrawal from the university for a particular enrollment period, refunds/repayments are calculated according to the Higher Education Act and its subsequent modifications. Campbell University complies 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. The Withdrawal Form must be completed with proper signatures obtained, and turned into the Registrar’s Office for placement in the student’s permanent file. Failure to withdraw properly will result in a non-prorated reassessment of charges to the student account.

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

A refund is prorated at 5% increments with no refund available after 60% of usage. Exceptions for students receiving medical withdrawals approved by the Vice President for Student Life are considered for refund at a percent of usage beyond 60%. Tuition and fees proration schedule is as follows:

<table>
<thead>
<tr>
<th>Week</th>
<th>Prorated Charge</th>
<th>Percent of Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>No Charge</td>
<td>5%</td>
</tr>
<tr>
<td>Week 2</td>
<td>5%</td>
<td>10%</td>
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<tr>
<td>Week 3</td>
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<td>15%</td>
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<tr>
<td>Week 4</td>
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<td>Week 5</td>
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<td>Week 6</td>
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<td>Week 7</td>
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<td>Week 8</td>
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<td>Week 9</td>
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<td>Week 10</td>
<td>40%</td>
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<td>Week 11</td>
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<td>Week 12</td>
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<td>Week 13</td>
<td>55%</td>
<td>60%</td>
</tr>
<tr>
<td>Week 14</td>
<td>60%</td>
<td>65%</td>
</tr>
</tbody>
</table>

The Business Office is responsible for the reassessment of student account charges; however, it is the responsibility of the Financial Aid Office to ensure financial aid awards have been evaluated and reassessed accordingly. The Business Office reserves the right to hold refund of credit balances until the Financial Aid Office has evaluated and approved the release of funds awarded to students that withdraw from the University.

Master of Science in Clinical Research
Online Refund Policy
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 complies 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.

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.

Safety and Emergency Preparedness
In case of emergency, students and faculty may contact security services at ext. 1911 (on campus) and 911 (off campus). A TDD line is available at 910-893-1912. The campus safety department can be reached on campus at ext. 1375 and off campus at 910-893-1375. Phones on campus can be used to reach security in an emergency. More information related to campus safety tips, planning, sign up for alerts, and crime statistics can be reached at: http://www.campbell.edu/life/campus-safety/. Campbell University has an emergency preparedness plan that involves notifications sent through text message, email, campus signage, and postings on the University website and social media outlets. By logging into Blackboard, students and faculty can register for campus alerts.
Sexual Harassment
Sexual harassment is a violation of the University’s mission statement, code of honor and student code. Sexual harassment includes unwelcome sexual advances, requests for sexual favors and other physical and expressive behavior of a sexual nature in which:
- Submission to such conduct becomes a term or condition of an individual’s employment or education;
- Submission to such conduct becomes a basis for academic or employment evaluation;
- Conduct creates a hostile, intimidating, offensive, or demeaning employment or education environment.

Sexual harassment represents a form of abuse and/or intimidation and will be dealt with accordingly under the Student Code of Conduct, General Standards of Conduct, Article 6. It is recommended that students experiencing sexual harassment contact the associate dean for academic affairs or the associate dean of admissions & student affairs. However, students may contact any appropriate administrator and may bypass anyone who may be the subject of the complaint. A thorough investigation of complaints will be conducted, and there will be no retaliation for making complaints.

Withdrawal
Procedure:
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.

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

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

Optional Fees
- Parking permit
- Illness insurance
Honor Code
We, the students, staff and faculty of Campbell University’s College of Pharmacy & Health Sciences (CPHS), recognize that health care related professions are among the most noble and honorable callings to which one may aspire. These are professions that demand of their members the highest degree of professional competence, ethical behavior, and morality. They require continuous educational development, constant personal and professional self-examination, and an ever-present awareness and sensitivity to human problems. It is the responsibility of every health care related professional, from the day that his or her professional career begins, to seek to achieve the highest aspirations and goals inherent in the profession; to exhibit honor and integrity in the use of his or her special skills for the betterment of humankind; and to act at all times in a manner which will instill public confidence in the profession. We therefore adopt this Honor Code in an attempt to set forth the minimum standards by which our conduct should be governed.

Article 1: Academic Matters
A. General Statement
Recognizing that it is impossible and inadvisable to set forth with specificity a range of conduct that is prohibited, we nevertheless realize that questions arise occasionally with respect to what a student may or may not do in connection with an academic matter. This Honor Code therefore sets forth the minimum standards of conduct with the hope and expectation that a CPHS student will never approach, and certainly never fall below, these minimum standards. It is the obligation of the students and faculty to participate in making the honor system viable by reporting violations of all academic matters.

B. Definition
An academic matter means any one of the following: any activity which may affect a grade in a course; any activity which in any way contributes to satisfaction of the requirements of a course, or requirements for graduation, or co-curricular activities of an academic nature including student publication and competitions.

C. Prohibited Activities with Respect to Academic Matters
CPHS students shall not:
1. Use materials during an examination other than those specifically authorized by the instructor. To avoid even the appearance of impropriety during an examination, all books, notebooks, briefcases, and the like should be placed in the front or rear of the examination room.
2. Use of materials in any research or assignment that are specifically forbidden by the instructor. This includes reuse of the student’s own work.
3. Engage in any form of plagiarism. Plagiarism is using the words or ideas of another source directly without proper acknowledgment of that source. While it is often necessary to obtain information from other sources, the willful or inadvertent use of information from another source without acknowledging it (including all types of commercial term paper preparation services; internet or electronic database sources for term papers, journal clubs, or case presentations; and other students’ work) is considered plagiarism. Ignorance is not an excuse. The student bears the responsibility to learn from the individual instructor the procedure for acknowledging sources and indicating quotations as required for each assignment.
4. Give, solicit, or receive information or assistance to or from any person or source during an examination, makeup examination, or written assignment unless specifically authorized to do so by the instructor.
5. Submit modified or changed tests, answer sheets, or assignments for regrading.
6. Intentionally deface, remove without authorization, or conceal any material from CPHS, the Drug Information Center, or any library.
7. Make an unauthorized or improper use of a computer or computer program, including unauthorized use of programmable calculators during an examination.
8. Fail to report to the Student Conduct and Professionalism Committee any first hand knowledge of any violation to any of the aforementioned provisions of this Honor Code.
9. Willfully conceal or misrepresent information material to an investigation of any alleged violation of this Honor Code when the information is sought by the Student Conduct and Professionalism Committee, faculty, dean, or the dean’s designee.

Article 2: Non-academic Matters
A. General Statement
CPHS students are hereby informed that in their personal and professional lives they represent not only themselves, but also CPHS and the health profession. Therefore, while they have the right and freedom to exercise individual autonomy, they also have the responsibility to exercise that autonomy in a manner that will bring honor to themselves, CPHS, and their chosen profession.

B. Prohibited Activities with Respect to Nonacademic Matters
CPHS students are subject to the same level of conduct as all Campbell University students; students residing in university housing are subject to the rules for all students who reside in university housing. Any infractions of these rules will be handled by the Student Conduct and Professionalism Committee. All students are encouraged to study the sections concerning these violations in the current Campbell University Student Handbook.

In addition, CPHS student shall not:
1. Fail to conform his or her conduct to the ethical and moral standards of the health care profession as articulated in the Student Clinical Code of Conduct (Article 9).
2. Intentionally make misrepresentation on a resume or curriculum vitae concerning class rank, grades, academic honors, work experience, or any other matter relevant to job placement.
3. Purposely furnish false information.
4. Perpetrate any form of theft, forgery, falsification, or fraudulent use of university or work-site property.
5. Willfully conceal or misrepresent information material to an investigation of an alleged violation of this Honor Code when the information is sought by the Student Conduct and Professionalism Committee, faculty, dean, or the dean’s designee.
6. Use or remove unauthorized prescription or nonprescription drugs or appliances from the site of a clinical rotation or work-site.

Article 3: Violations: Civil Law
CPHS shall direct all cases concerning violations of civil laws to the Student Conduct and Professionalism Committee. Any violations will be handled by the faculty of the Student Conduct and Professionalism Committee as described in the University handbook. All students are encouraged to study the section concerning these violations in the Campbell University Student Handbook.

Article 4: Penalties
A. The associate dean of admissions & student affairs at CPHS may impose the following penalties for any of the violations listed above.
Recommendations to the associate dean of admissions & student affairs are submitted by the Student Conduct and Professionalism Committee. Following proper procedures listed in article 5 of this Honor Code, the Student Conduct and Professionalism Committee may recommend to the associate dean of admissions & student affairs for one or more of the following penalties:

1. **Separation**: Separation is a state in which the student is not permitted to continue his/her program at the university. The student shall be withdrawn from all uncompleted courses in which he/she is currently enrolled. The student will not be permitted to re-enter the College of Pharmacy & Health Sciences’ educational programs.

2. **Suspension**: Suspension is a temporary state of separation for definite period from the university including the programs, facilities and activities. The completion of the period of suspension does not guarantee reinstatement. The decision to readmit a student will be the responsibility of the associate dean of admissions & student affairs.

3. **Probation**: Probation can be of two types:

   **Level-one probation**
   Level-one probation for a stated period carries a loss of eligibility for:
   - Holding or running for elected office in student professional organizations;
   - Representing the University in any capacity both on campus and away from campus;
   - Competing for honors and distinctions;
   - Active participation as an elected representative or member of an honorary organization.

   Violation of the terms of level-one probation may result in extended probation, level-two probation, or in the student’s suspension.

   **Level-two probation**
   Level-two probation for a stated period carries a loss of eligibility for attendance at any and all CPHS sponsored activities. A student who is placed on level-two probation will automatically be placed on level-one probation. Violation of the terms of level-two probation may result in extended probation or in the student’s suspension.

   The terms of probation will be enforced by the Student Conduct and Professionalism Committee. Other persons may be appointed by the associate dean of admissions & student affairs or the Student Conduct and Professionalism Committee to help enforce said terms.

1. **Community Service**: Community service for a stated number of hours will require a student to perform tasks that will benefit the community or CPHS. Tasks will be assigned and administered by the director of admissions & student affairs. Failure to perform required service in an appropriate fashion may result in probation.

2. **Loss or Lowering of the Course Grade**: All students who are found guilty of the act of cheating or plagiarism shall receive a score of zero (0) on that specific component of the course (quizzes, tests, projects, assignments, etc). Specific penalties for these violations may also include, but are not limited to, course failure, probation, suspension, and/or separation from the program and the University. A second act of cheating or plagiarism by the student will result in the separation of the student from the University.

3. **Reprimand**: An official reprimand will be given by the Student Conduct and Professionalism Committee when the charges are not dismissed. A summary of the offense and the reprimand will be placed in the students file in the dean’s office.

B. **Any professor may define penalties for a student who violates particular course regulations. The professor must clearly state these regulations and penalties in his or her course syllabus. The student has the right to appeal such penalties to the Student Conduct and Professionalism Committee.**

**Article 5: Student Conduct and Professionalism Committee**

**A. General Statement**

The associate dean of admissions & student affairs is responsible for the administration of the CPHS disciplinary system. This responsibility is exercised on behalf of the president of the University and entails the supervision of several bodies. Alleged violations of the University’s student code of conduct or civil laws will be handled by the University policies as written in the Campbell University Student Handbook. Alleged violations of the CPHS Honor Code will be evaluated by the Student Conduct and Professionalism Committee.

**B. Organization**

The Student Conduct and Professionalism Committee is composed of faculty members from each department, students and the assistant director of student affairs (ex-officio). An ad-hoc member will be chosen to replace any member who cannot or chooses not to attend the proceedings. The associate dean of admissions & student affairs will appoint this member.

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

C. **Instigation of Hearings**

When there is a suspicion of academic misconduct, investigation and appropriate actions may be pursued by either the professor of the course in which the alleged misconduct occurred or by the Student Conduct and Professionalism Committee. Individual faculty policies concerning misconduct should be clearly stated in the course syllabus. The accused student has the right to appeal any action by the faculty member to the Student Conduct and Professionalism Committee, in which normal committee procedures will be followed.

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

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

1. The professor can opt to deal with the situation, in which case the student(s) must
be informed of allegations and afforded an opportunity to defend him or herself.
2. The case can be referred to the Student Conduct and Professionalism Committee for resolution. Referral to the committee must be by a written memo which names the student, describes the alleged misconduct (including pertinent dates and times), and summarizes the content of earlier meetings regarding this case.
3. The case may be dismissed.

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

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

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

The committee shall vote on whether or not preliminary findings warrant a full hearing by a simple majority vote. If a hearing is deemed necessary, the chair will notify the student and witnesses of the hearing date in writing at least three (3) days prior to the hearing. A waiver of his or her notice may be made if the student so chooses. A full hearing should be held within ten (10) days of the preliminary committee review.

If the committee votes that no hearing is warranted, the case will be dismissed.

The chair will file the minutes in the permanent files of the Student Conduct and Professionalism Committee and a copy shall be placed in the dean’s office until the student graduates or leaves CPHS. Should additional information become available, the chairperson may reopen the case and ask the committee to consider the new information.

All sessions of the committee will be closed to all individuals except those immediately concerned in the case, except by the expressed wish of the accused that the hearings be open. No attorney shall be present, as this is not a court of law. In case of a closed hearing, all persons present at the proceedings shall be bound to disclose no more than the committee does in its official report on the case. Revelation of such details will be considered a violation of the Honor Code.

In the case of closed hearings, the testimony of each witness shall be given while the other witnesses in the case are out of the room. In open hearings, the witnesses of both parties shall be present during the entire proceedings.

The committee may allow introduction of evidence other than testimony of witnesses provided that the evidence is relevant to the question before the committee on any matter. The committee shall set rules for the conduct of all cases and all arrangements connected with the taking of evidence. Time frames for instigation of hearings and proceedings may be altered if circumstances warrant. Votes on all matters shall be a simple majority.

Deliberation of the committee shall take place in private and remain secret. Voting on decisions of guilt shall be by secret ballot. If the committee determines that the student was in violation of the Honor Code, it will consider and recommend the appropriate penalty. The student should be informed immediately of the judgment and the recommended penalty in case of guilt. The associate dean of admissions & student affairs may uphold or reject any decision or penalty recommended by the committee. A letter from the associate dean’s office will serve as the official notice of judgment and sentence.

All minutes and evidence shall be placed in the permanent files of the Student Conduct and Professionalism Committee, and a copy will be sent to the associate dean of admissions & student affairs’ office where it shall remain until the student graduates or leaves CPHS.

Article 6: Rights of the Student
With respect to violation of the student Honor Code, a student of Campbell University is guaranteed the following rights:
1. The right to a prompt hearing;
2. The right to a reasonable amount of time to prepare for his or her hearing;
3. The right of being presumed innocent until proven guilty;
4. The right to solicit advice;
5. The right to appeal;
6. The right to know his or her accuser;
7. The right to expect that the Student Conduct and Professionalism Committee will deal with his or her case in a confidential manner.

Article 7: Appeals Process
Any decision reached by the Student Conduct and Professionalism Committee may be appealed to the associate dean of admissions & student affairs. An appeal shall be requested by the student in writing, within three (3) days following the date the student receives the decision of the Student Conduct and Professionalism Committee. All appeals to the associate dean of admissions & student affairs should be delivered in person or by registered mail to:
Campbell University
College of Pharmacy & Health Sciences
Office of Admissions & Student Affairs
PO Box 1090
Buies Creek, NC 27506

Article 8: Notes and Definitions
1. The word “student” in this manual refers to any person who is enrolled in any course offered by CPHS.
2. The words “professor” or “instructor” in this manual refer to any person who is authorized by the University to hold and teach a class sponsored by the University or precept a student during an off-campus practice experience.
3. The words “University” and “College” refer to Campbell University and the College of Pharmacy & Health Sciences of Campbell University, respectively.
4. The phrase Student Conduct and Professionalism Committee refers to the committee that is assigned by the dean at CPHS to review situations in which students are involved in academic or professional misconduct.
5. The word “handbook” in this manual refers to the current edition of the Campbell University Student Handbook.
6. The word “day(s)” refers to official school days — not holidays, weekends or summer sessions.

Campbell University College of Pharmacy & Health Sciences reserves the right to change, delete or modify any item in this document at any time. Proper notification concerning changes, deletions or modifications of said document will be sent to all students within four weeks.

Article 9: Student Clinical Code of Conduct
CPHS students and faculty have adopted the following code of conduct to guide ethical behavior in hospitals, community pharmacies, research and production facilities, and various rotation sites included as clinical practice
experiences. We feel that the magnitude of our responsibility as health care professionals necessitates the establishment of the highest standards of professional conduct.

This code of conduct represents general standards of behavior and illustrates ideals for which to strive; however, specific infractions reported by students, preceptors or faculty to the chair of the Student Conduct and Professionalism Committee may be investigated by this committee with respect to both the magnitude and chronicity of incidents considered. It should also be understood that these general standards may not afford guidance in every conceivable situation or anticipate every possible infraction.

The Student Conduct and Professionalism Committee will be charged with the responsibility of promptly investigating alleged infractions of this code. All cases will require the submission of a report of findings and appropriate recommendations to the associate dean for admissions & student affairs in a timely manner.

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

The students attending CPHS will:

Respect and Concern for the Welfare of Patients

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

Respect for the Rights of Others

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

Trustworthiness

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

Responsibility and Sense of Duty

• Participate responsibly in patient care or research to the best of his or her ability and with the appropriate supervision.
• Undertake clinical duties and persevere until they are complete.
• Notify the responsible person if something interferes with his or her ability to perform clinical or academic tasks effectively.

Professional Demeanor

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

Student Rights

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

CPHS students:

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

If a preceptor feels a student lacks adequate knowledge or skills, he or she has the responsibility to inform and instruct that student so he or she can improve his or her performance.

If a student feels that a preceptor has committed infractions against the above standards, he or she has the responsibility of informing that preceptor, whether by direct contact or by way of an honest preceptor evaluation at the end of a rotation, of such feelings so that the preceptor can improve his or her performance.

NOTE: The above standards of conduct are based on the Code of Conduct for Duke University Medical Students and have been adapted to meet the individual needs of CPHS.

Article 10: Pledge

A student’s signature indicates that he or she agree to uphold the following pledge. This pledge must be signed prior to entry into CPHS.

I ______________________________, having read and receiving a clear understanding of the basis, spirit and interpretation of the Honor Code, pledge my personal honor. I will uphold this code and its standards in all matters. If at any time I violate the letter or the spirit of this pledge, I accept full responsibility for my actions.

By my signature, I also attest that I have read and understand the information presented in the academic bulletin.

________________________________________
Signature

___________
Date
Administrative Departments

Office of the Dean
Michael L. Adams, PharmD, PhD, Acting Vice President for Health Programs, Dean, College of Pharmacy & Health Sciences
Wesley Rich, PhD, MEd, MA, Associate Dean for Administration
Pam Roberts, Assistant to the Vice President of Health Programs and Dean
Lee Holquist, Assistant to the Dean’s Office

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Stéphanie Knight, Admissions Counselor
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Julie Smith-Hamilton, BSCR Program Director

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Chad Moody, Research Technician II
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18 | 2015-2016 Academic Bulletin
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Pre-Nursing

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

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

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

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

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

Freshman Year
Semester 1

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

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<tr>
<td>CUC 100 - Connections</td>
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<tr>
<td>ENGL 102 - Academic Writing &amp; Literature</td>
<td>3</td>
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<tr>
<td>PSYC 222 - General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 275 - Clinical Microbiology</td>
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<tr>
<td>RELG 125 - Intro to Christianity</td>
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</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>

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

Sophomore Year
Semester 1

<table>
<thead>
<tr>
<th>Courses</th>
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<tr>
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<td>SOCI 225 - Principles of Sociology</td>
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<tr>
<td>BIOL 220 - Human Anatomy &amp; Physiology I</td>
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<td>PSYC 260 - Developmental Psychology</td>
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<td><strong>Total</strong></td>
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It is strongly recommended that students take RELG 224 - Christian Ethics.

Semester 2

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<tr>
<td>CUC 200 - Connections</td>
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<tr>
<td>ENGL 2XX - Literature</td>
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<td>BIOL 223 - Human Anatomy &amp; Physiology II</td>
<td>4</td>
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<tr>
<td>COMM 261 - Team &amp; Small Group Communication</td>
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<tr>
<td>MATH 160 - Statistics</td>
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<tr>
<td>ELECTIVE (Humanities)</td>
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<tr>
<td><strong>Total</strong></td>
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</tbody>
</table>
Pre-Pharmacy

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

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

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

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

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

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

Freshman Year
Semester 1
Courses Credit Hours
CUC 100 - Connections 0.5
ENGL 101 - Academic Writing 3
CHEM 111 - General Chemistry 4
BIOI 111 - Basic Biology 4
RELG 125 - Intro to Christianity3 3
PE 185 - Lifetime Wellness 2
PHAR 100 - Pre-Pharmacy Freshman Seminar 1
Total 17.5

Semester 2
Courses Credit Hours
CUC 100 - Connections 0.5
ENGL 102 - Academic Writing & Literature 3
CHEM 113 - General Chemistry 4
BIOI 221 - Human Anatomy & Physiology 4
MATH 122 - Calculus 4
THEA 115 - Public Speaking8 3
Total 18.5

Sophomore Year
Semester 1
Courses Credit Hours
CUC 200 - Connections 0.5
CHEM 227 - Organic Chemistry 4
BIOI 334 - Microbiology 2,5 4
PHYS 221 - Physics I 4
MATH 160 - Statistics3 3
LANG 201 - Foreign Language6 3
Total 18.5

Semester 2
Courses Credit Hours
CUC 200 - Connections 0.5
CHEM 228 - Organic Chemistry 4
PHYS/BIOI 2xx - Physics II or Biology1 4
ECON 200 - Economics 3
HIST 1XX - Western Civilization I or II3 3
ENGL 2XX - Literature4 3
Total 17.5

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

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

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Courses Credit Hours
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CHEM 111 - General Chemistry 4
BIOI 111 - Basic Biology 4
RELG 125 - Intro to Christianity3 3
PE 185 - Lifetime Wellness 2
PHAR 100 - Pre-Pharmacy Freshman Seminar 1
Total 17.5

Semester 2
Courses Credit Hours
CUC 100 - Connections 0.5
ENGL 102 - Academic Writing & Literature 3
CHEM 113 - General Chemistry 4
BIOI 221 - Human Anatomy & Physiology 4
MATH 122 - Calculus 4
THEA 115 - Public Speaking8 3
Total 18.5

Sophomore Year
Semester 1
Courses Credit Hours
CUC 200 - Connections 0.5
CHEM 227 - Organic Chemistry 4
BIOI 334 - Microbiology 2,5 4
PHYS 221 - Physics I 4
MATH 160 - Statistics3 3
LANG 201 - Foreign Language6 3
Total 18.5

Semester 2
Courses Credit Hours
CUC 200 - Connections 0.5
CHEM 228 - Organic Chemistry 4
PHYS/BIOI 2xx - Physics II or Biology1 4
ECON 200 - Economics 3
HIST 1XX - Western Civilization I or II3 3
ENGL 2XX - Literature4 3
Total 17.5

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

Pharmacy Scholar candidates must apply to the Doctor of Pharmacy program utilizing the Early Decision process. The candidate’s Campbell University academic advisor must endorse the candidate’s application to the Doctor of Pharmacy program. Candidates must successfully fulfill all requirements for admission including an acceptable interview.

All acceptances are contingent based upon adequate completion of remaining coursework, matriculation requirements and conduct as defined in the CPHS honor code.

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

Department of Clinical Research
Campbell University
College of Pharmacy & Health Sciences
Department of Clinical Research
180 Main Street
Buies Creek, NC 27506
910-814-5755

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

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

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

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

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

1. GPA of 3.0 or higher
2. GRE verbal ≥ 50th percentile, quantitative ≥ 50th percentile, analytical writing ≥ 3.0 (a written request may be made for the consideration of PCAT/MCAT/LSAT/GMAT score)
3. All MSCR requirements. See admissions requirements.

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

The following courses will comprise the Clinical Research Minor:

- CLNR 324 - Intro to Biostatistics
- CLNR 330 - Regulatory Affairs I
- CLNR 334 - Scientific Literature Seminar I
- CLNR 341 - Medical Terminology
- CLNR 363 - New Product Development
- CLNR 364 - Principles of Clinical Research
- CLNR 365 - Managing & Monitoring Clinical Trials I
- CLNR 379 - Physical & Clinical Assessment
- CLNR 450 - Data Management
- CLNR 451 - Scientific & Technical Writing

Total: 19.5

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

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

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

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

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

2. Campbell University undergraduate student pursuing BSCR/MSCR 4+1
   Qualified applicants may apply to the MSCR program with the understanding the students will have a completed degree prior to enrolling in MS coursework as defined in the academic
Admission Requirements

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

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

Application Process

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

Policies

1. Matriculating students may enroll in MSCR courses before they have completed all program pre-requisites. However, students must complete pre-requisite coursework specified for any MSCR course prior to enrollment as indicated in the pre-requisite section above.
2. Those who have earned a terminal doctoral degree (e.g., PhD, MD, DO, DPT or PharmD) at a regionally accredited institution in the United States are not required to submit a GRE or other test scores.
3. Students not seeking a degree can register for courses if they:
   • Submit a completed application form and application fee.
   • Have earned a bachelor’s degree (or higher) from a regionally accredited college or university with a GPA of 3.0 or higher.
   • Submit official transcripts of all college/university work attempted.
   • Submit GRE scores, having achieved a verbal score ≥ 50th percentile, quantitative score ≥ 50th percentile and an analytical writing score ≥ 3.0 (a written request may be made for the consideration of PCAT/MCAT/LSAT/GMAT scores).
   • GRE School Code: 4575
   • Department Code: 0626
   • Submit two letters of recommendation.

International Students

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

Refund Policy

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

Note: A maximum of 6 credit hours (not to exceed three courses) of MSCR courses that do not require a pre-requisite may be taken. Non-degree-seeking students are encouraged to register as early as possible. However, in cases where demand for a class exceeds capacity, degree-seeking students will have priority over non-degree-seeking students, which may result in a non-degree seeking student being removed from the course. Credit for any course(s) taken by non-degree seeking students who enroll in the program will be valid for up to five years following course completion.

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

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

MS in Clinical Research
Students in the MSCR program are subject to:
1. Maintain minimum cumulative grade point average of 3.0.
2. All grades of D or F must be repeated and receive a grade of C or higher.
3. Failure to maintain any of the above will result in a probationary period not to exceed one academic year. In addition, students must complete an academic contract to acknowledge their academic probation.
4. Students must complete all coursework within five years of entering the program.

Policies & Procedures
A maximum of six credit hours based on previous didactic coursework may be requested for exemption or transfer by submitting the appropriate form (with supporting documentation) to the course director. Subsequent approval by the department chairman and the associate dean for academic affairs is required.

Transfer credit from equivalent coursework may be conditionally granted. When requesting a transfer, students must include:
• Previous course name and graduate level number
• Semester course was taken
• Educational institution where course was taken
• Syllabus for the course
• Transcript with grade for course (in applicant file at Campbell)

When transferring, the course director will make a recommendation regarding possible equivalency directly to the chairman of the department and the associate dean for academic affairs. Final decisions regarding course equivalencies will be made jointly by the chairman of the department of Clinical Research and the associate dean for academic affairs. The total number of transfer credits granted per student will follow the policies of Campbell University’s College of Pharmacy & Health Sciences and the Southern Association of Colleges and Schools Commission on Colleges.

Grade Appeals
For information regarding grade appeals, reference the College’s Policies & Procedures at the beginning of this bulletin.
The MSCR program will not approve a request to participate in commencement ceremonies unless all credit hours have been completed.

Curriculum
BS in Clinical Research

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

Semester 2
Courses Credit Hours
CHEM 113/113L - General Chemistry II 4
BIOL 221/221L - Human Anatomy & Physiology 4
ENGL 102 - Academic Writing & Literature 3
MATH 122 - Calculus 4
THEA 115 - Public Speaking 3
CUC 100 - Connections 0.5
Total 18.5

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

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

Semester 5
Courses Credit Hours
CLNR 341 – Medical Terminology 1
CLNR 363– New Product Development 2
CLNR 364 – Principles of Clin. Research 2
CLNR 324 – Introduction to Biostatistics 3
CLNR 451 – Sci. & Technical Writing 1.5
A/M/T 131 - Intro to Art, Music, Theatre 3
Total 15.5

Semester 6
Courses Credit Hours
CLNR 328 – Introduction to Pharmacology 4
CLNR 330 – Regulatory Affairs I 2
CLNR 442 – Interpersonal Skills 2
CLNR 379 – Physical & Clinical Assessment 2
CLNR 334 – Scientific Literature Seminar I 1
ENGL 20X – Literature I or II 3
Total 16

Semester 7
Courses Credit Hours
CLNR 465 – Manag/ Monitor Clin. Trials II 2
CLNR 440 – Regulatory Affairs II 2
CLNR 450– Data Management 3
CLNR 336 – Scientific Lit Seminar II 1
UNIV XXX - Humanities/Social Science Elective (see listing) 3
Elective 2/3
Total 13-14

Semester 8
Courses Credit Hours
CLNR 420 – Senior Internship*** 14
CLNR 416 – Senior Seminar 1
Total 15

Total credit hours earned= 130.5 - 132.5

*Courses not required for BSCR degree; however strongly recommended for pre-pharmacy requirements.
** Microbiology can be taken prior to cell biology in certain situations, with academic advisor approval.
*** All BSCR students must submit and pass a criminal background check and drug screen. Students must have all necessary
immunizations in order to be placed on internship. Please refer to the General Information section of the Academic Bulletin for more specific details.

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

Humanities Electives: RELG: 202, 212, 224, 236, 251, 322 or higher; PHIL 121; ENGL 201-206; HIST 1XX – 4XX; LANG 221, 222, 241, 242

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

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

4+1 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 4+1 program places students on a fast track toward completing two degrees in five years by utilizing two summer sessions. By virtue of pursuing both degrees, the program offers students a competitive edge in the job market and rapid career advancement.

Semester 1

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>CHEM 111/111L - General</td>
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<tr>
<td>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>RELG 125 - Intro to Christianity</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 100 - Pre-Pharmacy</td>
<td>3</td>
</tr>
<tr>
<td>Seminar*</td>
<td>1</td>
</tr>
<tr>
<td>CUC 100 - Connections</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15.5</strong></td>
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Semester 2

<table>
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<tr>
<th>Courses</th>
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<tbody>
<tr>
<td>CHEM 113 – General Chemistry II</td>
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</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>ENGL 102 – Academic Writing &amp; Literature</td>
<td>3</td>
</tr>
<tr>
<td>PE 185 – Lifetime Wellness</td>
<td>2</td>
</tr>
<tr>
<td>CUC 100 - Connections</td>
<td>0.5</td>
</tr>
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<td><strong>Total</strong></td>
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Semester 3

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

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<tbody>
<tr>
<td>CHEM 228 – Organic Chemistry II</td>
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<tr>
<td>BIOL XXX – *Biology Elective</td>
<td>3/4</td>
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<tr>
<td>ENGL 20X - Literature I or II</td>
<td>3</td>
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<tr>
<td>MATH 160 - &gt;Statistics</td>
<td>3</td>
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<tr>
<td>UNIV XXX - Social Science Elective (see listing)</td>
<td>3</td>
</tr>
<tr>
<td>CUC 200 - Connections</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>16.5-17.5</strong></td>
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Semester 5

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<tr>
<td>CLNR 341 – Medical Terminology</td>
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<tr>
<td>CLNR 363– New Product Development</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 364 – Principles of Clin. Research</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 324 – Introduction to Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>CLNR 451 – Sci. &amp; Technical Writing</td>
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<tr>
<td>THEA 115 - Public Speaking</td>
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Semester 6

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>CLNR 328 – Introduction to Pharmacology</td>
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<tr>
<td>CLNR 442 – Interpersonal Skills</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 338 – Scientific Literature Seminar</td>
<td>2</td>
</tr>
<tr>
<td>UNIV XXX - Humanities/Social Science Elective (see listing)</td>
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<tr>
<td>LANG 20X - Foreign Language</td>
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<tr>
<td>HIST 1XX - Western Civ. I or II</td>
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Summer 1

<table>
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<tbody>
<tr>
<td>CLNR 519/L – Physical &amp; Clinical Assessment w/lab</td>
<td>2</td>
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<tr>
<td>CLNR 561 – Healthcare Economics</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 552 – Scientific Communication</td>
<td>2</td>
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Fall I

<table>
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<tr>
<th>Courses</th>
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<tbody>
<tr>
<td>CLNR 525 - Medical Ethics</td>
<td>2</td>
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<tr>
<td>CLNR 559 - Man./Mon. Clinical Trials</td>
<td>3</td>
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<td><strong>Total</strong></td>
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Spring I

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>CLNR 517 - Biostatistical Inference</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 568 - Project Management</td>
<td>2</td>
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<tr>
<td><strong>Total</strong></td>
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Summer 2

<table>
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<tr>
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<th>Credit Hours</th>
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<tbody>
<tr>
<td>CLNR 420 – +Senior Internship</td>
<td>14</td>
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<tr>
<td>CLNR 416 – Senior Seminar</td>
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Fall II

<table>
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<tr>
<th>Courses</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>CLNR 691 - Research Project II</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 5XX - Elective</td>
<td>2</td>
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Spring II

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

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>CLNR 694 - Research Project III</td>
<td>2</td>
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<tr>
<td>CLNR 5XX - Elective</td>
<td>2</td>
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<tr>
<td><strong>Total</strong></td>
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Summer I

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>CLNR 519/L – Physical &amp; Clinical Assessment w/lab</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 561 – Healthcare Economics</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 552 – Scientific Communication</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
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Fall I

<table>
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<tr>
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<tr>
<td>CLNR 525 - Medical Ethics</td>
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Spring II

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>CLNR 517 - Biostatistical Inference</td>
<td>2</td>
</tr>
<tr>
<td>CLNR 568 - Project Management</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4</strong></td>
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</tbody>
</table>

**Total = 153.5-155.5 Hours**
*All freshmen will take a freshman seminar with their academic program.

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

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

+Internship sites will require a criminal background check and drug screen before beginning the internship.

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

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

**Curriculum**

**MS in Clinical Research**

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

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

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

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

*Permission of instructor required.

Federally supported financial aid requires a minimum of 2 credit hours per academic term.

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

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

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

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

CLNR 328 – Introduction to Pharmacology
Credit: 4 Hours
The basic principles of drug action are covered through discussion of the responses of biological systems to drugs and chemicals. Emphasis is placed on understanding mechanism of action through detailed exploration of receptor-mediated events (pharmacodynamics). The course considers the quantification of drug action as well as the absorption, distribution, metabolism, and elimination of xenobiotics (pharmacokinetics) and how these and other factors relate to drug action. Prerequisite: Required: BIOL 221, CHEM 227; Recommended: CHEM 228

CLNR 330 – Regulatory Affairs I
Credit: 2 Hours
This course provides the student with an overview of the regulatory affairs universe, with emphasis on requirements for initiating clinical trials, developing pharmaceutical products, and gaining approval for worldwide marketing applications. This is the first of two required regulatory affairs courses in the BSCR program. Prerequisites: CLNR 363 & 364

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

CLNR 336 - Scientific Literature Seminar II
Credit: 1 Hour
This interactive class is a continuation of CLNR 334, Scientific Literature Seminar I. The class focuses on the continued application of skills relating to literature searching and critical analysis techniques, skills that were introduced in CLNR 334. These skills are applied in the form of two solo oral presentations. For the first presentation, students will prepare a brief presentation on a scientific research paper of their own choosing and use PowerPoint to make visual aids to supplement their presentation. The second will be a seminar-style presentation on a health-related topic, again using PowerPoint to generate slides as visual aids. Prerequisite: CLNR 334

338 Scientific Literature Seminar
(4+1 Program)
This interactive class is combination of CLNR 334, Scientific Literature Seminar I and CLNR 336, Scientific Literature II. This interactive class introduces students to literature searching and critical analysis techniques. Skills in critical analysis of the scientific literature will be developed in small group discussion of scientific papers chosen by the faculty and students. These skills are applied in the form of written and oral presentations of projects developed by researching the current biomedical and pharmaceutical literature. In addition to learning how to apply these skills with a team, complete comprehension of these skills are applied in the form of two solo oral presentations. For the first presentation, students will prepare a brief presentation on a scientific research paper of their own choosing, and use PowerPoint to make visual aids to supplement their presentation. The second will be a seminar-style presentation on a health-related topic, again using PowerPoint to generate slides as visual aids.

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

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

CLNR 364 – Principles of Clinical Research
Credit: 2 Hours
This course will provide a broad understanding of clinical research-definition, methodology, conduct and applications. The course will explore basic elements of clinical research including the hierarchy of clinical design, clinical trial conduct, and safety surveillance. Application of clinical trial knowledge to specific medical practice issues will also be explored.

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

CLNR 379 & 379L – Physical & Clinical Assessment with Lab
Credit: 2 Hours
This course is designed to introduce students to the basic principles of medical terminology, history taking, the basic techniques of physical examination assessment, and diagnostic test data.
Prerequisite: BIOL 221

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

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

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

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

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

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

CLNR 465 – Managing & Monitoring Clinical Trials II
Credit: 2 Hours
This course will continue to build upon concepts introduced and developed in CLNR 365, Managing and Monitoring Clinical Trials I. Additional material will be added as appropriate, and students will achieve a greater depth of knowledge and understanding about topics covered in the first course.
Prerequisites: CLNR 363, 364, 365

CLNR 504 – Special Research in Clinical Research
Credit: 1-2 Hours
This course will introduce the graduate student to the scientific inquiry process used in clinical and scientific research. This involves application of the scientific process including but not limited to: literature evaluation, literature search, design of project, development of written and verbal skills, data acquisition and analysis, use of web-based systems and data and project management.

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

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

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

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

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

**CLNR 519 & 519L* – Physical & Clinical Assessment with Lab**  
Credit: 2 Hours  
This course is designed to introduce the student to medical terminology, medical history taking, basic physical examination techniques, and diagnostic tests commonly used in clinical research protocols.  
Prerequisite: Anatomy & Physiology  
*Dual PharmD/MSCR students are required to attend a seated lab on main campus

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

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

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

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

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

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

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

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

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

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

**CLNR 559 – Advanced Managing & Monitoring of Clinical Trials**  
Credit: 3 Hours  
This course provides an in-depth introduction to the principles of managing and monitoring clinical trials. The varied environments in which clinical research is conducted are described and the roles of the different personnel involved in a clinical trial will be detailed. Students will be introduced to the elements of clinical trial protocols and data collection strategies. The course will provide an overview of regulations relevant to clinical trials including responsibilities of sponsors,
CLNR 560 – Pharmacoeconomics
Credit: 2 Hours
Students will become aware of the various tools, methods, and strategies to evaluate the economic contribution of specific drug therapies at a variety of levels. Rising health care costs will force decisions to be made regarding the overall cost implications as well as the effectiveness of the technology. The application of such pharmacoeconomic analyses to clinical practice and pharmaceutical care will be instrumental to pharmacy’s success in our future health care delivery. This course will be presented utilizing a parallel learning model whereby students will be asked to give and receive information about pharmacoeconomics.
This course is co-listed as PHAR 561.

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

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

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

CLNR 568 – Project Management
Credit: 2 Hours
This course will introduce the generic concepts of professional project management that should be applied while managing projects in several industries. The full life cycle of a project will be studied including project initiation, planning, execution, control and closeout. The project manager’s role in developing and maintaining the timeline, budget, and quality of a project will be defined. Students will be exposed to the principles of project management as it applies specifically to clinical research. While managing an individual clinical trial will be covered, the broader perspective of managing new drug development projects in the pharmaceutical industry will be a major focus. In the latter, the project manager integrates basic research, pharmacology, toxicology, chemical development, analytical development, pharmacokinetics, metabolism, clinical research, and marketing aspects for delivering a new product to the marketplace.
Prerequisite: CLNR 505, 515 & 559

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

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

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

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

CLNR 593 – Leadership Development
Credit: 2 Hours
This course is intended for students who are contemplating a management/leadership career track. The lectures present fundamental skills of organizational behavior and leadership that are essential to effectively managing and leading both direct reports and project teams. The course involves lectures supported by video presentations, group discussion, and role play. Participant materials can be retained by the student for future use/reference in the workplace. The course contains both theoretical content, as well as an examination of processes involved in human behaviors in the health care organizational setting. Due to the heavy emphasis on process, participation and group-intensive instructional approaches are used in the course; there are three primary student goals for the course: Demonstrate mastery of the content as specified in the course objectives; apply the theories to case studies and Develop an understanding of your own managerial style.
CLNR 595 – Bioterrorism & Mass Public Health Threats
Credit: 2 Hours
This course provides an overview of current issues related to bioterrorism and mass threats to public health. Details of specific risks of threat entities and their treatment will be taught. An emphasis is placed on response planning and preparation. Cross listed as PHAR 595

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

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

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

CLNR 694 - Research Project III
Credit: 2 Hours
This course is the third part of the four-part Research Project course, which comprises CLNR 690, 691, 694, and 695. The student will utilize prior didactic experience in the Clinical Research Program to propose, design, and conduct the research project. The research project must involve patient-oriented research, including: epidemiologic and behavioral studies, health outcomes research, and/or health services research. The project will be conducted under the supervision of the Course Director. Students will have an internal faculty advisor who is a full-time faculty member in the Department of Clinical Research, as well as a Statistician faculty member of the Department of Clinical Research assigned to advise them throughout the project. In this course, students will finalze their Research Protocol, obtain IRB approval/exemption (as appropriate) and develop a Data Analysis Plan for their project. In the last research project course, the student will analyze their data and present study results. Prerequisite: CLNR 691

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

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

Department of Clinical Research
910-814-5755

Department of Pharmaceutical Sciences
910-893-1838

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

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

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

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

Curriculum
Clinical Research Concentration

Fall Semester 1
Courses Credit Hours
CHEM 111/111L - General Chemistry I 4
CHEM 113/113L - General Chemistry II 4
BIOL 221/221L - Human Anatomy & Physiology 4
ENGL 102 - Academic Writing & Literature 3
MATH 122 - Calculus 4
THEA 115 - Public Speaking 3
CUC 100 - Connections 0.5
Total 16.5

Fall Semester 2
Courses Credit Hours
CHEM 113/113L - General Chemistry II 4
BIOL 221/221L - Human Anatomy & Physiology 4
ENGL 102 - Academic Writing & Literature 3
MATH 122 - Calculus 4
THEA 115 - Public Speaking 3
CUC 100 - Connections 0.5
Total 18.5

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

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

Fall Semester 5 (B1 CLNR)
Courses Credit Hours
CLNR 326 - Principles of Clinical Biochemistry 3
CLNR 341 - Medical Terminology 1
CLNR 363 - New Product Development 2
CLNR 364 - Principles of Clinical Research 2
CLNR 324 - Intro to Biostatistics 3
CLNR 451 - Scientific & Technical Writing 1.5
UNVI XXX - Social Science Elective 3
Total 19

Spring Semester 6 (B1 CLNR)
Courses Credit Hours
CLNR 328 - Intro to Pharmacology 4
CLNR 330 - Regulatory Affairs I 2
CLNR 365 - Managing & Monitoring Clinical Trials 2
CLNR 442 - Interpersonal Skills 2
CLNR 379 - Physical & Clinical Assessment 2
CLNR 334 - Scientific Literature Seminar I 1
ENGL 2XX - Literature 3
RELG 2XX - Religion Elective 3
Total 19

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

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

Total credit hours earned 142.5-144.5
**Pharmaceutical Sciences Concentration**

<table>
<thead>
<tr>
<th>Fall Semester 1</th>
<th>Credit Hours</th>
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<tr>
<td>BIOL 111/111L - Basic Biology</td>
<td>4</td>
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<tr>
<td>ENGL 101 - Academic Writing</td>
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<tr>
<td>RELG 125 - Intro to Christianity</td>
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<td>PE 185 - Lifetime Wellness</td>
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<td>CUC 100 - Connections</td>
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<td>PHAR 100 - Freshman Seminar</td>
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<tr>
<td>CHEM 113/113L - General Chemistry II</td>
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<td>BIOL 221/221L - Human Anatomy &amp; Physiology</td>
<td>4</td>
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<td>ENGL 102 - Academic Writing &amp; Literature</td>
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<tr>
<td>MATH 122 - Calculus</td>
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<tr>
<td>A/M/T 131 - Intro to Art, Music, Theatre</td>
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<td>CUC 100 - Connections</td>
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<td>PHYS XXX - Biology Elective</td>
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<td>HIST 1XX - Western Civilization I or II</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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<th>Credit Hours</th>
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<tbody>
<tr>
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<tr>
<td>CHEM 228/228L - Organic Chemistry</td>
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<tr>
<td>PHYS 222 - General Physics II</td>
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<tr>
<td>ECON 200 - Economics</td>
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<tr>
<td>ENGL 2XX - Literature</td>
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<td>CUC 200 - Connections</td>
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<th>Fall Semester 5 (B1 PHSC)</th>
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<tbody>
<tr>
<td>Courses</td>
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<tr>
<td>PHSC 323 - General Biochemistry</td>
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<tr>
<td>PHSC 325 - General Biochemistry Prelab/Lab</td>
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<tr>
<td>PSCH 210 - Laboratory Safety</td>
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<tr>
<td>PSCH 324 - Intro to Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 451 - Scientific &amp; Technical Writing</td>
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<tr>
<td>PHSC 442 - Interpersonal Skills</td>
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<td>PHSC 220 - Quantitative Lab Techniques</td>
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<td>UNIV XXX - Humanities/Social Science</td>
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<tr>
<th>Spring Semester 6 (B1 PHSC)</th>
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<tr>
<td>PHSC 328 - Intro to Pharmacology</td>
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<tr>
<td>PHSC 410 - Analytical Instrumentation</td>
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<tr>
<td>PHSC 411 - Analytical Instrumentation Prelab/Lab</td>
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<tr>
<td>PHSC 338 - Product &amp; Process Validation</td>
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<tr>
<td>PHSC 326 - Molecular Biology</td>
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<tr>
<td>PHSC 327 - Molecular Biology Prelab/Lab</td>
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<tr>
<td>PHSC 334 - Scientific Literature Seminar I</td>
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<tr>
<td><strong>Total</strong></td>
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<tr>
<th>Fall Semester 7 (P1)</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Courses</td>
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<tr>
<td>PHAR 302 - Anatomy &amp; Physiology</td>
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<tr>
<td>PHAR 304 - Biochemistry</td>
<td>4</td>
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<tr>
<td>PHAR 312 - Medical Microbiology</td>
<td>4</td>
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<tr>
<td>PHAR 301 - Pharmaceutical Calc.</td>
<td>2</td>
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<tr>
<td>PHAR 305 - Pharmacy in the US Health care System</td>
<td>2</td>
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<tr>
<td>PHAR 309 - Drug Information</td>
<td>1</td>
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<tr>
<td>PHAR 331 - Pharm. Care Skills</td>
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</tr>
<tr>
<td>PHAR 335 - Community Service I</td>
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<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>Spring Semester 8 (P1)</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>Courses</td>
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</tr>
<tr>
<td>PHAR 306 - Anatomy &amp; Physiology</td>
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<tr>
<td>PHAR 303 - Patient Counseling &amp; Prof. Communications</td>
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<tr>
<td>PHAR 310 - Immunology</td>
<td>3</td>
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<tr>
<td>PHAR 308 - Clinical Biochemistry</td>
<td>3</td>
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<tr>
<td>PHAR 307 - Pharmacy Marketing &amp; Management</td>
<td>3</td>
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<tr>
<td>PHAR 332 - Pharmaceutical Care Skills Lab</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 335 - Community Service</td>
<td>0</td>
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<tr>
<td><strong>Total</strong></td>
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</tbody>
</table>

Total credit hours earned: **139.5**

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

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

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

**Course Descriptions**

For a list of course descriptions, please view the clinical research, pharmaceutical sciences, and pharmacy sections of this Academic Bulletin.
Catherine W. Wood School of Nursing
Campbell University
College of Pharmacy & Health Sciences
P.O. Box 1090
Buies Creek, NC 27506
910-893-1967

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

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

We believe that:

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

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

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

Program Objectives

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

Behavioral/Social Skills & Professionalism
Students in the Catherine W. Wood School of Nursing must demonstrate attributes of empathy, compassion, integrity, collegiality, high moral character, excellent interpersonal communication, listening, and self-motivation; as such qualities are assessed throughout the program. Students must exhibit sound judgment in the care of patients and academic inquiry along with developing appropriate and effective patient relations. Additionally, students must be able to function in a collegial environment demonstrating proper levels of assertiveness, task delegation, along with organization and time management skills. Adequate emotional health is necessary to deal with strenuous environments and work effectively in demanding situations. Students must maintain good general health, self-care and hygiene throughout the program.

Campbell University, Catherine W. Wood School of Nursing, and CPHS Guidelines

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

Admission Policies
The Campbell University admission requirements are necessary for acceptance and designation of a Pre-Nursing intent. The student will be required to take the prerequisites for the pre-nursing program. The application for the BSN portion occurs during the fall. This process requires a competitive application for admission to the degree program.
BSN Admission
The process of BSN Division admission will be a joint collaborative effort with the College of Pharmacy & Health Sciences (CPHS) Admissions Office. The admissions process includes meeting specific prerequisite coursework with a minimum grade of "C". Coursework may be in progress at the time of application, but completed by the start of the BSN Coursework.

The admissions process includes an electronic college application which will open in September 2015. The final application deadline date will be in December 2015. There is a non-refundable application fee of $50.00.

1. The preferred minimum cumulative grade point average (GPA) is a 3.0 on a 4.0 scale with the minimum for admission a 2.8.

2. The preferred minimum science GPA is a 3.0 on a 4.0 scale with the minimum for admission a 2.8 as well.

3. The admissions process may include a personal interview and each applicant will submit an essay.

4. The admissions committee will evaluate each applicant’s academic performance, essay, service history, special skills, and abilities that enhance the nursing profession.

5. Applicants will be notified by the Catherine W. Wood School of Nursing of an admissions decision through email and an official decision letter to be delivered early in the spring for a fall start. Pre-Nursing students that do not achieve qualified status will be advised as to alternate degree options at Campbell University.

6. Admission and graduation from Campbell University does not guarantee that the student is eligible to sit for the NCLEX-RN exam.

BSN Transfer Credit
The Registrar’s Office is responsible for the transferring of credits from other institutions onto the Campbell University transcript. A transfer student must meet the core requirements and apply to the BSN division, through the electronic college Application website.

1. The cumulative GPA from transferred coursework is considered as part of the holistic competitive application to the BSN Degree Program.

2. A grade of “C” or better must have been earned in the BSN course work and been completed within the previous three years.

3. For transfer credit of BSN level courses, the official transcript and copy of the course syllabus must be submitted to the Catherine W. Wood School of Nursing for determination of course equivalency by a faculty with expertise or the BSN Curriculum Committee. Transfer credit is not granted automatically and is restricted to didactic courses with no clinical component. A letter from the former Dean/Director indicating that the student left in good academic and professional standing is required.

4. CPHS reserves the right to make changes in requirements for admission, curriculum, standards for progression, advancement and graduation, fees and rules and regulations.

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

Grading Scales

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</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 6 years of matriculation.

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

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

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

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

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

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

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.

Tuition and Fees
The Board of Trustees annually reviews and approves the tuition and fee schedule. The published information is on the website and updated in March of each year. Reference the General Information section in this bulletin for more details.

There will be additional expenses upon entry to the BSN Degree Program. These may include but are not limited to the following: scrub uniform, lab coat, lab kit, transportation to clinical, cost of NCLEX-RN testing, CPR certification, immunizations, books, supplies and graduation expenses.
Financial Aid
For information on financial aid availability and application procedures, please contact the student financial planning office at (910) 893-1310 or visit www.campbell.edu/admissions/financialaid/

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

Conduct
The enrolled student is accountable for all aspects of the current Student Conduct (Professional, Academic and The Honor Code) as defined in the Undergraduate Academic Bulletin and the General Information section of this academic bulletin for the Honor Code. Nursing students are required to read and sign the Honor Code, attesting that they understand the code that they have read and understand the bulletin, and will abide by it. A signed copy of the code will be kept in the students file.

Academic Standards
A Campbell University academic review convenes in May of each year to review the academic progress of undergraduate students. An “Academic Warning” is issued to any student who incurs a quality point deficit between 10 and 34.5 quality points. The student is referred to campus resources for resolution.

The Catherine W. Wood School of Nursing has additional progression requirements and focused remediation efforts designed to protect the student and public in care delivery situations while assuring a greater opportunity for success. Please refer to Student Handbook for the Catherine W. Wood School of Nursing or the CPHS Academic Bulletin for details. Reports on academic performance and progress are generated at the mid-term and completion of each semester. The Catherine W. Wood School of Nursing core faculty meets at the end of each academic term, or as necessary, to discuss the academic performance of all students. Any discussions regarding type of academic deficiency and remedy occurs with development of an Academic Success Plan and draft of a letter from the program director stating the specific academic standing described in the following sections. The letter is provided to the student via email and hard copy by mail. The letter will contain the following:

- Rationale for academic standing
- Criteria required to regain good academic standing
- Contact information of the program director to discuss items outlined in the letter
- Notification of appeals process

Good Academic Standing
Students are considered in good academic standing providing:

- A semester GPA ≥75 or 2.0 average cumulative grade point (GPA) based on the BSN grading criteria
- Satisfactory evaluation on the Clinical Evaluation Tool for clinical experiences
- No violations of student Honor Code or Code of Conduct have occurred
- No occurrence of a patient safety violation

Remediation
Students who fail to meet academic standards within a given course or clinical experience rotation may be required to remediate coursework and/or attend another clinical. Students will require remediation for:

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

Academic Probation
Academic probation is the initial action for a student failing to make satisfactory academic progress following remediation interventions. A student will be placed on academic probation for:

- Inability to maintain a cumulative GPA of ≥75 or 2.0 based on the BSN grading criteria
- Failure to follow through with the Academic Success Plan (remediation)
- Continuing Needs Improvement or Unsatisfactory ranking on the Clinical Evaluation Tool
- A grade of D or F in any single course
- Repeated violations of the student Honor Code or Code of Conduct
- Violations of patient safety

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 Curriculum Committee and program director will specify the length of time of the suspension and remedial work required for reinstatement, with approval from the Associate dean for academic affairs.

Academic Dismissal
The Catherine W. Wood School of Nursing Curriculum Committee and program director may recommend academic dismissal to the associate dean for academic affairs under the following circumstances:
Withdrawal

A student may withdraw from a course without grade assignment at any time prior to the end of the fourth week of a semester. Withdrawal from a course after that period will result in a recorded grade. In the event a student must withdraw from the College, he or she will be responsible for obtaining the required form for withdrawal from the University Registrar. It is also the student’s responsibility to complete the prescribed administrative procedures to assure notification to all individuals and offices that require this information. In cases of serious illness, injuries, or extreme circumstances which normally would require the student’s withdrawal from the College, the student may fully withdraw from all semester coursework without receiving a grade. Such cases require adequate documentation of the circumstances and approval by program director.

Delayed Graduation Policy

If a nursing student is required to re-take classes as a result of specific course failure or a deficiency in overall academic performance, then a delay in scheduling nursing clinical experiences or matriculation through the curriculum will occur and the student’s graduation may be delayed. Voluntary course withdrawals or a temporary leave of absence may cause a delay in scheduling clinical experiences, progress through the curriculum, and a subsequent delay in graduation. Any alteration in the normal curriculum progression may affect a student’s financial aid status or qualification for education-based financial aid. For specific counseling and advice, students should contact the 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:
1. Successful completion of all courses, requirements, and remediation
2. Successful completion of all clinical experiential training
3. Attendance of graduation week activities that includes licensure preparation courses and comprehensive curriculum review
4. Attendance at the graduation ceremony is expected

The BSN Division

- Requirements for Graduation
  Completion of the nursing and general education courses prescribed by the faculty.

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

The Catherine W. Wood of Nursing appoints a faculty advisor for each student to assist the student with program planning and tracking of prerequisites and BSN division requirements. However, the responsibility for assuring that all requirements are met rests solely with the student.

Registered Nurse Licensure Exam Requirements

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

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

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

Please note that conferring a degree to a student who has completed the curriculum does not guarantee that the Board of Nursing will issue an Authorization to Test.
Curriculum
The Essentials of Baccalaureate Education for Professional Nursing Practice [American Association of Colleges of Nursing (AACN), 2008]; Nursing Scope and Standards of Practice (2010) provide the framework for the development of the liberal arts and pre-licensure nursing education curriculum and the associated clinical experiences. The Essentials address the core knowledge required of nursing professionals and concepts of client centered care, interprofessional teams, evidence-based practice, quality improvement, patient safety, informatics, clinical reasoning, genetics, cultural sensitivity, professional values and practice across the life span.

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

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

Sophomore Year
Semester 1
Courses  Credit Hours
CUC 200 - Connections  0.5
SOCL 225 - Principles of Sociology  3
BIOL 220 - Human Anatomy & Physiology I  4
PSYC 260 - Developmental Psychology  3
ELECTIVE (Humanities)*  3
Total  13.5

Semester 2
Courses  Credit Hours
CUC 100 - Connections  0.5
ENGL 102 - Academic Writing & Literature  3
BIOL 275 - Clinical Microbiology  4
RELG 125 - Intro to Christianity  3
A/M/T 131 - Intro to Art, Music, or Theater  3
Total  16.5

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

Junior Year
Semester 1
Courses  Credit Hours
NURS 300 - Professional Nursing Practice  3
NURS 310 - Health Assessment  3
NURS 320 - Fundamentals of Nursing Practice with Older Adults  6
NURS 330 - Concepts of Pathophysiology & Pharmacology I  3
Total  15

Senior Year
Semester 1
Courses  Credit Hours
NURS 400 - Adult Health Nursing Practice II  5
NURS 410 - Nursing Practice of Women & Children  6
NURS 420 - Leadership in Nursing  3
NURS 430 - Health Policy  2
Total  16

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

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

NURS 100 - Success in Nursing Seminar
Credit: 1 hour
The design of the course is an introduction to the profession of nursing and to the Catherine W. Wood School of Nursing. This course emphasizes several key concepts necessary to build students’ skill sets for their future endeavors in college as well as their chosen profession as a professional nurse.

NURS 300 - Professional Nursing Practice
Credit: 3 hours
The design of the course is to review the past, present, and future of professional nursing. There is emphasis on discussion of professional values, philosophies, core competencies and the knowledge needed for professional practice.

NURS 310 - Health Assessment
Credit: 3 hours
The course teaches the student assessment of the healthy adult client with consideration of common variations and life span influence. Assessment of the client is within a cultural, spiritual, member of family and community framework.

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

NURS 330 - Concepts of Pathophysiology and Pharmacology I
Credit: 3 hours
This is the first of two courses that examine the physiologic mechanisms underlying selected alterations in health that occur throughout the life cycle. Integrated within the course are basic pharmacological concepts with emphasis on drug groups and nursing implications.

NURS 340 - Concepts of Pathophysiology & Pharmacology II
Credit: 3 hours
The second course in the series that examine the physiologic mechanisms underlying selected alterations in health that occur throughout the life cycle. Integrated within the course are basic pharmacological concepts with emphasis on drug groups and nursing implications.

NURS 350 - Research and Evidenced Based Practice
Credit: 3 hours
This course examines the steps of the research process, and provides the student with the basic skills and knowledge to evaluate research. Integrated throughout the course are ethical considerations and methods of protection of human subjects.

NURS 360 - Adult Health Nursing Practice I
Credit: 5 hours
This is the first course that emphasizes the care of adults in a broad range of settings with the role of the nurse as a member of the health care team. It reinforces the role of critical thinking and the nursing process as a mechanism to synthesize knowledge.

NURS 370 - Psychiatric and Mental Health Nursing Practice
Credit: 5 hours
This course focuses on alterations in mental health and the theories and principles underlying nursing care of this population. Students examine predisposing biological, psychological, and sociocultural factors contributing to the development and continuation of disorders.

NURS 400 - Adult Health Nursing Practice II
Credit: 5 hours
This is the second course that emphasizes the care of adults in a broad range of settings with the role of the nurse as a member of the health care team. It reinforces the role of critical thinking and the nursing process as a mechanism to synthesize knowledge.

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

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

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

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

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

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

NURS 480 - Nursing Informatics
Credit: 2 hours
Nursing Informatics combines knowledge and skills from nursing, computer technology, information and cognitive science to design and implement automated systems that support practice in the delivery of care.
Pharmaceutical Sciences

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

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

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

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

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

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

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

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

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

- Barry-Wehmiller
- BioAglytx
- Biogen
- Carolina Medical Products
- Catalent
- Covidien
- DSM
- El, Inc.
- Eisai
- Fujifilm Diosynth
- FDA
- GlaxoSmithKline (RTP and Zebulon)
- Grifols
- Hospira (Clayton and Rocky Mount)
- Liquidia
- Lq3 Pharma
- Envisia
- Metrics
- Novozyymes
- Prometrics
- Purdue Pharma
- Sandoz
- State Bureau of Investigation

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

The degree offers the four tracks listed below. Each track has two options (see Curriculum).

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

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

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

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

Admission Policies

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

MSPS Admission
Applications for admission to the MSPS degree program are evaluated by the admissions committee in the Department of Pharmaceutical Sciences. Acceptance into the graduate program is based on the overall record and ability of the applicant. Applicants failing to meet admissions requirements may be considered for admission provided their record is indicative of exceptional ability. Applicants are only considered for fall enrollment due to the curriculum sequences of the program. Since the program operates on rolling admission and has limited enrollment, individuals are strongly encouraged to submit their applications early in the admissions cycle. Applications received after April 1 have an increased probability of being deferred to a wait list. International applicants must apply by April 1 due to additional process requirements with associated timelines.
There are three pathways to admissions to the MSPS program. Applicants may be considered in one of the following categories:

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

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

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

Admissions Requirements

- Undergraduate GPA of 3.0 or better

Prerequisites

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

(See individual tracks for additional prerequisites.)

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

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

Application Process

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

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

Admission Policies

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

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-degrees seeking students can only register during the first week of classes and may not pre-register for courses. Students must earn a grade of C or higher in MSPS coursework taken prior to admission to be eligible for admission into the program. Admission into the program also requires completion of the admissions requirements not already satisfied.

4. Students taking a leave of absence of greater than one semester must notify the director of pharmaceutical sciences programs in writing.

International Applicants

1. International applicants are not eligible for provisional acceptance, if a US student visa is required.
2. International applicants must submit a certified copy of a financial or bank statement that shows sufficient funds to obtain a US student visa.
3. The completed application for admission must be received by the April 1 deadline to be considered for admission.
4. If English is not the applicant's native language, applicants must also submit official scores for the TOEFL (≥ 80) 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).

Refund Policy

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

Academic Standards

BS in Pharmaceutical Sciences

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

MS in Pharmaceutical Sciences

For Students in the MSPS program:

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

The chair of the APSC will periodically review students' files and forward his/her findings to the director of pharmaceutical sciences programs. The director in turn will notify the student in writing concerning his/her standing in the program. A student may appeal the director's decision to the committee (see Rule 4 above). The student must submit a written petition to the chair of the committee within two weeks of the student's receipt of notification of the enforcement action. The committee's recommendations are forwarded to the associate dean for academic affairs of the College of Pharmacy & Health Sciences for a review. The committee's chair will notify the student in writing concerning the committee's recommendations. Upon receipt, the student can appeal the decision to the associate dean for academic affairs for a final review. The
Grade Appeals
Students in the Master of Science in Pharmaceutical Sciences (MSPS) program who feel that they have a just reason for appealing a grade in a College of Pharmacy & Health Sciences course must first appeal to the course instructor. If the issue cannot be adequately resolved with the instructor, then the student should appeal to the course master. If no resolution is achieved at that level, the student should appeal to the appropriate department chair. After efforts within the department, a student may appeal to the Graduate Academic Performance and Standards Committee (MSPS program) to seek resolution. If the student still feels that the resolution is not just, the student must submit a written petition to the associate dean for academic affairs of the College of Pharmacy & Health Sciences within seven days of the student’s receipt of notification of the Graduate Academic Performance and Standards Committee (MSPS program) decision. The petition must contain the specific variance requested and a description of any extenuating circumstances intended to justify granting the variance. The decision of the associate dean for academic affairs of the College of Pharmacy & Health Sciences is final.

Curriculum

### BS in Pharmaceutical Sciences

#### Fall Semester 1

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
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<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>RELG 125 - Intro to Christianity</td>
<td>3</td>
</tr>
<tr>
<td>PE 185 - Lifetime Wellness</td>
<td>2</td>
</tr>
<tr>
<td>CUC 100 - Connections</td>
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<td>PHAR 100 - Freshman Seminar</td>
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#### Spring Semester 2

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<tr>
<td>CHEM 113/113L - General Chemistry II</td>
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<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, Theatre</td>
<td>3</td>
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<td>CUC 100 - Connections</td>
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#### Fall Semester 3

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<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>
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<tr>
<td>HIST 1XX - Western Civilization I or II</td>
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<td>LANG 201 - Foreign Language</td>
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#### Spring Semester 4

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<tr>
<td>CHEM 228/228L - Organic Chemistry II</td>
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<tr>
<td>PHYS 222 - General Physics II</td>
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<tr>
<td>ECON 200 - Economics</td>
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<tr>
<td>ENGL 2XX - Literature</td>
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<tr>
<td>UNIV XXX - Humanities Elective</td>
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<tr>
<td>CUC 200 - Connections</td>
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#### Fall Semester 5

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<tr>
<td>PHSC 323 - General Biochemistry</td>
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<td>PHSC 325 - General Biochemistry</td>
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<tr>
<td>PSCH 210 - Laboratory Safety I</td>
<td>1</td>
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<td>PSCH 324 - Intro to Biostatistics</td>
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<td>PHSC 451 - Scientific &amp; Technical Writing</td>
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<td>PHSC 442 - Interpersonal Skills</td>
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<tr>
<td>PHSC 220 - Quantitative Lab Techniques</td>
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<td>UNIV XXX - Humanities/Social Science Elective</td>
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#### Spring Semester 6

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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 - 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 - Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>PHSC 334 - Scientific Literature</td>
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<td><strong>Total</strong></td>
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#### Fall Semester 7

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
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<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</td>
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<tr>
<td>UNIV XXX - Elective</td>
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#### Spring Semester 8

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

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

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

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

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

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

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

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

Track Curricula
Bioprocessing & Biotechnology
Prerequisites: Microbiology, Molecular Biology

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

Industrial Pharmacy
Prerequisites: Analytical Instrumentation

Courses | Credit Hours
--- | ---
PHSC 412L – Analytical Lab Survey | 1
PHSC 514/515/515L – Industrial Pharmacy/Lab | 4
PHSC 540 – Adv. Physical Pharmacy | 3
PHSC 542 – Adv. Topics in Industrial Pharmacy | 3
PHSC 543L – Adv Industrial Pharmacy Lab | 1
PHSC 510 – Pharmacokinetics | 2
PHSC 565 – Adv Exptl Design Analysis | 2
PHSC 573 – Intro Multivar. Analysis | 1
Total | 17

Pharmaceutical Analysis
Prerequisites: Analytical Instrumentation

Courses | Credit Hours
--- | ---
PHSC 412L – Analytical Lab Survey | 1
PHSC 514/515/515L – Industrial Pharmacy/Lab | 4
PHSC 528/529L – Adv. Pharm Analysis-Separation/Lab | 4
PHSC 530/531L – Adv. Pharm. Analysis- Spectroscopy/Lab | 4
PHSC 538/538L– Bioprocessing I: Upstream Technologies/ Lab | 4
PHSC 540 or 542 + 543L – Adv. Topics in Industrial Pharmacy or Adv Physical Pharmacy with Adv Industrial Pharmacy Lab | 4
PHSC 590/590L – Adv Pharmacology and Toxicology Lab | 3

Group 1 Electives
Each student will complete either PHSC 620 (Research Project) OR any two of the following courses that are not already in their track curriculum (above):

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

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

Courses | Credit Hours
--- | ---
PHSC 504 – Adv. Research in Pharm. Sciences | 1-3
PHSC 510 – Pharmacokinetics | 2
PHAR 522 – Practical Compounding Techniques | 1
PHAR 534 – Herbal Medicine | 1
PHAR 550 – Alternative Medicine | 3
PHSC 518 – General Toxicology/ Lab | 3
PHSC 522 – Molecular Modeling | 2
PHSC 558 – Essentials of Toxicology | 2
PHSC 564 – Pharmacogenetics | 2
PHSC 565 – Adv. Exp. Design | 2
PHSC 577, 581, 583 – Pharmacology & Medicinal Chemistry II, III or IV | 3-4
PHSC 582 – Botanical Medicine Seminar | 1
Federally supported financial aid requires a minimum of half-time enrollment (3.5 credit hours).

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

5 Years + Research
The Department of Pharmaceutical Sciences offers a 5 Years + Research providing an option for students to earn their BS and MS in pharmaceutical sciences degrees in five years, plus the amount of time it takes to complete a research project.

Admission Requirements
Students working toward a BSPS degree may apply for the 5 Years + Research option if they meet the following:

- Minimum GPA (overall and major) of 3.0 after the fall of the junior year

BSPS students interested in completing the 5 Years + Research should apply by March of their junior year to assure a place in the MSPS program. Applicants must submit GRE scores before they begin their senior year to be considered for acceptance. PCAT scores may be accepted in place of GRE.

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

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

Semester 7 Courses Credit Hours
PHSC 514/515/515L – Industrial Pharmacy/Lab 4
PHSC 438 – Pharm. Methods & Bioprocessing/Lab 4
PHSC 336 – Scientific Literature Seminar II 1
PHSC 523 – Graduate Experimental Design & Biostatistics* 4
Total 13
*Students may take PHSC 523 in place of PHSC 324 during their BSPS junior year (semester 5)

Semester 8 Courses Credit Hours
PHSC 420 – Senior Internship 12
PHSC 416 – Senior Seminar 1
Total 13

BSPS degree conferred/GPA qualification required for continuation

Graduate Year
Students receive full acceptance into MSPS program

Semester 9 Courses Credit Hours
PHSC 534 – M.S. Seminar I 1
PHSC XXX – Elective 3
PHSC 610 – Research Proposal or Group 1 Elective 2-4
Total 6-8

Semester 10 Courses Credit Hours
PHSC 536 – M.S. Seminar II 1
PHSC 620 – Research Proposal or Group 1 Elective and PHSC 610 4-6
Total 5-7

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

Bioprocessing & Biotechnology Courses Credit Hours
Semester 7
PHSC 526/526L - Protein Analysis & Bioassays/Lab 4
PHSC 508 - Drug Dev. and Pharm. Regulations 2

Semester 8
PHSC 538/538L - Bioprocessing I: Upstream Technologies/Lab 4

Semester 9
PHSC 539/539L - Bioprocessing II: Downstream Processing/Lab 4
PHSC 512 - Fundamentals of Cellular Pharmacology 4

Semester 10
Only core courses this semester

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

Semester 8
PHSC 540 - Adv. Physical Pharmacy 3

Semester 9
PHSC 510 - Pharmacokinetics 2
PHSC 512 - Fundamentals of Cellular Pharmacology 4

Semester 10
PHSC 542 - Adv. Topics in Industrial Pharmacy 3
PHSC 543L - Adv. Industrial Pharmacy Lab 1

Pharmaceutical Analysis Courses Credit Hours
Semester 7
PHSC 528/529L - Adv. Pharm. Analysis-Separations 4

Semester 8
PHSC 530 - Adv. Pharm Analysis-Spectroscopy/Lab 4

Semester 9
PHSC 508 - Drug Dev. and Pharm. Regulations 2
PHSC 512 - Fundamentals of Cellular Pharmacology 4

Semester 10
Only core courses this semester

Pharmacology Courses Credit Hours
Semester 7
PHSC 508 – Drug Dev. & Pharm. Regulations 2
PHSC 512 – Fundamentals of Cellular Pharmacology 4

Semester 8
PHSC 592 – Adv. Cellular & Molecular Pharmacology 3

Semester 9
PHSC 590/590L – Adv. Pharmacology & Toxicology/Lab 3
PHSC 526/526L – Protein Analysis & Bioassays/Lab 4
PHSC 510 – Pharmacokinetics 2

Semester 10
Only core courses this semester
Cooperative Degree Program
The College of Pharmacy & Health Sciences (CPSH) joined forces with North Carolina State University’s College of Engineering to offer a cooperative degree program for chemical engineering students to earn a master’s degree in addition to their bachelor’s degree at NC State, from start to finish in a total of five years. Through this partnership, students focusing on biomolecular engineering or biomanufacturing sciences concentrations at NC State can start earning their master’s degree during their senior year. Students graduate with two degrees in only five years.

Program Purpose
This unique program provides students with specialized training that combines chemical engineering with advanced pharmaceutical sciences principles including: aspects of drug design, mechanisms of drug action, dosage form design and formulation, quantitative analysis and quality control, manufacturing, bioprocessing, and regulatory compliance. Students in the program will complete the curriculum in the Industrial Pharmacy Track of the MSPS program at CPSH.

Admission Requirements
- GPA of at least 3.0
- Submit GRE (or PCAT) scores

Application deadline is December 31 of the student’s junior year.

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

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

Course Descriptions

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

PHSC 220/220L – Quantitative Laboratory Techniques/Lab
Credit: 2 hours
This course introduces the general mathematical principles and basic laboratory techniques used in pharmaceutical analyses. The course covers the basic laboratory skills needed to accurately and precisely measure the mass of solid and liquid samples and the volume of liquid samples. The proper skills for the preparation of mixtures and solutions of various analyte concentrations are also covered. Sources of error in measurements and methods for estimation of precision and accuracy of measurements are discussed. The concepts of concentration, dilution and stoichiometry are reviewed including their use in analysis. In addition, basic acid base theory including acid base titration is reviewed. Students will prepare buffer solutions and the use of buffers will be discussed. The use of spreadsheets in chemical analysis will be introduced.

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

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

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

PHSC 327/327L - Molecular Biology Pre-lab/Lab
Credit: 1 hour
This course is intended to provide the student with experience in working with basic techniques used in the construction and manipulation of recombinant DNA molecules. Emphasis will be placed on explaining laboratory results in terms of fundamental concepts in molecular biology. A detailed laboratory notebook will be used to document all lab work, and its contents will be the basis of a final report describing the semester’s work. This course is open to all majors, but priority will be given to Pharmaceutical Sciences majors. Prerequisites: Biochemistry with lab and Microbiology with lab or instructor’s permission. Co-requisite: PHSC 326

PHSC 328 – Introduction to Pharmacology
Credit: 4 hours
The basic principles of pharmacology and toxicology are covered through discussion of the responses of biological systems to drugs and chemicals. The course also considers the absorption, distribution, metabolism, and excretion of xenobiotics and how these factors relate to drug action. Prerequisite: BIOL 221/221L.

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

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

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

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

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

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

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

**PHSC 418/419/419L – Industrial Pharmacy/Pre-Lab/Lab**
Credit: 3/1 hours
This survey course introduces student to the preformulation and manufacturing of pharmaceutical dosage forms. Prerequisites: Completion of all BSPS courses or bioproducts for analysis, use of large-scale purification, and modification) of compounds Pharmacopeia, proper treatments (isolation, and macromolecular structure-function relationships are presented. The course also illustrates the importance of the selection, mentoring, and management of employees including gender and culture differences.

**PHSC 414 – Research Seminar**
Credit: 1 hour
Skills such as negotiation, written and verbal communication, managing meetings, facilitation, influencing without authority and assertiveness are often key determinants of success in the workplace. In order to teach students how to be more effective in their careers, students will be coached and evaluated on their ability to plan, conduct and/or facilitate meetings, generate effective communications, and foster effective listening, assertion, and influencing skills. Strategies that are successful during conflictive encounters will be stressed. In addition, students will be exposed to effective techniques used in the selection, mentoring, and management of employees including gender and culture differences.

**PHSC 451 – Scientific & Technical Writing**
Credit: 1 hour
Scientific and Technical Writing is a required course for Pharmaceutical Sciences and Clinical Research majors designed to enable students to effectively and accurately write and review a variety of technical documents used in pharmaceutical-related industries. Prerequisite: ENGL 101 and 102.

**PHSC 462 and 466 – Anatomy & Physiology**
Credit: 4 hours each
This two-course sequence presents a comprehensive study of the structure and function of all organ systems as well as basic biochemical and biophysical principles of cellular and membrane function. Relevance to clinical states and drug action is also presented in many areas.
The courses are co-listed as PHAR 302 and 306. Permission of instructor.

**PHSC 464 – Biochemistry**
Credit: 4 hours
A comprehensive course in biochemistry that discusses the metabolism of amino acids, carbohydrates, lipids, and nucleic acids. Principles of enzyme kinetics and regulation, bioenergetics, thermodynamics, and macromolecular structure-function relationships are presented. This course is co-listed as PHAR 304. Permission of instructor.

**PHSC 468 – Clinical Biochemistry**
Credit: 3 hours
This course discusses the principles of quantitative analysis utilized in common clinical laboratory tests. An introduction to interpretation of abnormal clinical laboratory values is presented. Quantitative aspects of nutrition are presented, and regulatory effects of various hormones are described.
Diseases such as atherosclerosis and diabetes are discussed. This course is co-listed as PHAR 308. Permission of instructor.

**PHSC 470 – Immunology**
Credit: 4 hours
This course covers basic immunology and the fundamental principles relating to the immune response in normal and disease states. This course is co-listed as PHAR 310. Permission of instructor required.

**PHSC 472 – Medical Microbiology**
Credit: 3 hours
The basic medical microbiology concepts are presented. Information necessary to diagnose and manage infected patients are covered. Current, important bacteriologic, virologic, mycotic, and parasitic pathogens and their related diseases are discussed. Clinical presentations, principles of laboratory diagnosis, and preventative measures are emphasized. This course is co-listed as PHAR 312.

**PHSC 474 – Biopharmaceutics**
Credit: 3 hours
The biological and physicochemical factors of the body, drugs, and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses are presented. This course is co-listed as PHAR 314.

**PHSC 504 – Advanced Research in Pharmaceutical Sciences**
Credit: Variable (Maximum 3 hours)
This research course is intended for the advanced student. It continues the basic science research experience. This course is co-listed as PHAR 504.

**PHSC 508 – Drug Development and Pharmaceutical Regulations**
Credit: 2 hours
This course provides basics in worldwide drug regulations, facilities and process qualification, and in the processes involved in drug discovery and development. Students will learn how specific activities fit into the overall scheme of drug development, and evaluate the impact of each activity on the overall progression of a new drug candidate. The principles of good manufacturing practices (cGMP), quality control, and quality assurance are introduced. The basics of regulatory compliance, the global nature of regulations, and the importance of validation in the Pharmaceutical and Biotechnology Industries are presented. Federal regulations and documentation requirements are discussed.

**PHSC 510 – Pharmacokinetics**
Credit: 2 hours
This course provides the student with an understanding of basic, clinically applicable pharmacokinetic formulas and the assumptions that are involved with their use in therapeutic drug monitoring. This course is co-listed as PHAR 410.

**PHSC 512 – Fundamentals of Cellular Pharmacology**
Credit: 4 hours
This course begins with the background material in cell biology necessary for understanding the latter section on cellular and molecular pharmacology. The focus will be on experimental methods for discovery of the biochemical mechanisms of cell function and drug action. Topics will include cell structure and function, ligand/receptor interactions, drug efficacy, and structure and function of the four classes of receptors. Prerequisite: Biochemistry

**PHSC 514/515/515L – Industrial Pharmacy/Pre-Lab/Lab**
Credit: 3/1 hours
This survey course introduces student to the pre-formulation and manufacturing of pharmaceutical dosage forms. Students gain hands-on experience in the laboratory setting performing a variety of USP tests and unit operations. Prerequisites: Biochemistry with lab. Credit cannot be received for both PHSC 514/515/515L and PHSC 418/419/419L. Prerequisites: Enrollment is limited to students who have declared Pharmaceutical Science as a major or permission of the course director.

**PHSC 518 General Toxicology**
Credit: 3 hours
This course is designed to give the student a broad appreciation of the field of Toxicology. The student is guided through the mechanisms by which toxicants enter the body and the biotransformation processes that result in the disease-producing entities. The various cellular mechanisms of toxicity and the major target organs affected by toxins will be treated in some detail. Didactic material may be augmented with both in vivo and in vitro experimental laboratories for assessing toxicity. Aspects of environmental, forensic, clinical toxicology and risk assessment will also be addressed in this course. Prerequisites: PHAR 412 or PHSC 512. This course is co-listed as PHAR 518.

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

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

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

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

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

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

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

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

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

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

**PHSC 542 – Advanced Topics in Industrial Pharmacy**
Credit: 3 hours
This graduate-level course discusses topics in enabling technologies such controlled release, targeted drug delivery, aerosol/pulmonary delivery, lyophilization, and protein/peptide formulation development. Advanced Topics in Industrial Pharmacy emphasizes drug delivery, dosage form design, and manufacture of pharmaceutical dosage forms. This course promotes the mission of Campbell University by equipping students with superior skills in Industrial Pharmacy which will allow them to function as a pharmaceutical scientist with the highest integrity and service. Prerequisites: PHSC 412L, PHSC 418/419/419L or PHSC 514/515/515L or permission of the course director.

**PHSC 543L – Advanced Industrial Pharmacy Laboratory**
Credit: 1 hour
The emphasis of this graduate-level Advanced IP Laboratory course is on the formulation, manufacture, and analysis of various pharmaceutical dosage forms (including sterile, liposomes, lyophilized, and nano-colloidal products) in a cGMP simulated environment equipped with the most advanced state-of-art manufacturing and analytical equipment. The laboratory requires students to apply knowledge gained from previous courses. Prerequisite: PHSC 418/419/419L or PHSC 514/515/515L.

**PHSC 558 – Essentials of Toxicology**
Credit: 2 hours
The General Toxicology course is designed to give the student a broad appreciation of the field of Toxicology. This includes the absorption, distribution, metabolism and elimination of toxicants from the body, as well as the mechanisms of specific toxicity to target organs. Significant treatment of the areas of Forensic, Environmental and Clinical toxicology are also undertaken. Prerequisites: PHAR 412 or PHSC 512.

**PHSC 564 – Pharmacogenetics**
Credit: 2 hours
The basic principle of pharmacogenetics/pharmacogenomics and their relationship to current drug development are discussed. This course is co-listed as PHAR 594 and CLNR 528.

**PHSC 565 – Advanced Experimental Design**
Credit: 2 hours
This course illustrates the application of design of experiment as a tool in research and industry. Prerequisite: PHSC 523 or PHAR 528. This course is co-listed as PHAR 566.

**PHSC 573 – Introduction to Multivariate Analysis**
Credit: 1 hour
This course demonstrates the applications of an advanced statistical tool, MVA, as a data evaluation and predictive tool in pharmaceutical research and industrial operations. Prerequisite: PHSC 565

**PHSC 574 – Biopharmaceutics**
Credit: 3 hours
This course presents the biological and physiochemical factors of the body, drugs and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses. This course co-listed as PHAR 314 and PHSC 474.
PHSC 577 – Pharmacology & Medicinal Chemistry II
Credit: 4 hours
Part of the series of PharmD Pharmacology/Medicinal Chemistry courses, PHSC 577 examines the pharmacology/medicinal chemistry of drugs that modulate neuromuscular transmission and the autonomic nervous system. The course will cover drugs used in the treatment of cardiovascular diseases such as hypertension, cardiac arrhythmias and congestive heart failure. Prerequisite: PHAR 412 or PHSC 512. This course is co-listed as PHAR 417.

PHSC 581 – Pharmacology & Medicinal Chemistry III
Credit: 4 hours
This course is designed to provide the student with a firm foundation in the various therapeutic agents available to effectively manage central nervous system, paracrine/inflammatory, gastric erosion, and endocrine conditions. Particular emphasis will be placed on the cellular and physiological systems that are regulated by these agents to bring about the desired therapeutic outcome. For each class of agents the prototypical drug will be emphasized with regard to mechanism of action, chemical characteristics, pharmacokinetic considerations, adverse effects and drug interactions. For the newer agents in each class, significant differences from the prototypical agents will be highlighted.

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

PHSC 583 – Pharmacology & Medicinal Chemistry IV
Credit: 3 hours
This course is designed to provide the student with a firm foundation in the various therapeutic agents available to effectively manage infections and cancers. Particular emphasis will be placed on the cellular and physiological systems that are regulated by these agents to bring about the desired therapeutic outcome. For each class of agents the prototypical drug will be emphasized with regard to mechanism of action, chemical characteristics, pharmacokinetic considerations, adverse effects and drug interactions. For the newer agents in each class, significant differences from the prototypical agents will be highlighted.

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

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

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

PHSC 620 – Research Project
Credit: 4 hours
This course is intended to provide students with an in-depth understanding of research. This is achieved by an intensive, hands-on laboratory experience in research methods and strategies used to test a specific hypothesis. Prerequisites: This course is restricted to MSPS students in the research tracks who have successfully completed PHSC 610 with a grade of B or better, as well as have approval from their research committee. Additionally, the student cannot be on academic probation at the time of enrollment in the course.
Admission Policies
The College of Pharmacy & Health Sciences (CPHS) not only strives to produce graduates who possess a broad scientific and medical knowledge base but who also have the ability to effectively communicate this information to their patients. Students are encouraged to serve in leadership roles within the community and professional organizations. The College instills in students the importance of showing empathy, compassion and understanding to their patients.

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

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

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

Admissions Criteria
Applicants must complete a minimum of 64 credit hours prior to matriculation into the doctor of pharmacy program.

All required pre-professional academic work must be completed at an accredited college or university in the United States. All prerequisite courses must be completed with earned grades of “C” or higher.

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

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

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

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

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

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

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

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

Please note: The prerequisites for the doctor of pharmacy program will change for applicants applying during the 2016-2017 admissions cycle. We recommend that applicants in the 2015-2016 admissions cycle review these modifications and consider taking any of these courses as additional electives if possible. These courses will improve your academic background; however they are NOT required during this admissions cycle:
• 4 hours each of General Biology, Anatomy & Physiology, and Microbiology, all with lab
• 3 credit hours of Public Speaking
• 3 credit hours of Statistics

Application Deadline
Beginning each fall, members of the next class are selected using a modified rolling admissions procedure. Under this system, qualified applicants are admitted into the doctor of pharmacy program on an ongoing basis until the class is filled. Applicants are strongly encouraged to submit all required admissions documents early in the admissions cycle to maximize their admissions potential. Applications received after November 1 face significantly increased competition for admission and may be placed on a waiting list, regardless of qualifications. The final deadline for applications is March 1; all information must be received by this date.

Application Process
• All material must be received by March 1.
  ▪ Complete online PharmCAS application at www.pharmcas.org.
  ▪ Submit all official transcripts to PharmCAS.
  ▪ Submit Pharmacy College Admission Test (PCAT) scores to PharmCAS.
  ▪ Information on the PCAT may be obtained at www.pcatweb.info.
  ▪ Submit three letters of recommendation to PharmCAS. At least one letter from a science professor and a pharmacist is strongly preferred.
  ▪ Submit supplemental application with required fee of $50 and a passport size photo to CPHS.
The applicant is responsible for ensuring the timely receipt and updating of all required application documentation. A file will not be reviewed by the Admissions Committee until all application materials have been received by the Admissions Office.

**PharmCAS**

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

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

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

**Supplemental Materials**

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

**Interviews**

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

**Early Decision Program**

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

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

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

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

**Tuition and Fees**

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

**Refund Policy**

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

**Technical Standards for Admission & Matriculation**

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

Technical Standards refer to nonacademic admissions and matriculation criteria that are essential to participation in the Doctor of Pharmacy program. All students must possess the intellectual, ethical, physical, and emotional capabilities required to undertake the full curriculum and to achieve the levels of competence required by the faculty. The technical standards described below are essential functions and therefore prerequisites for entrance, continuation, promotion, and graduation from the Doctor of Pharmacy program, with or without appropriate accommodations in compliance with the Americans with Disabilities Act.

Candidates for admission to and graduation from the Campbell University College of Pharmacy & Health Sciences Doctor of Pharmacy Program must possess the following abilities:

**Observation**

The candidate/student-pharmacist must be able to observe required lectures, demonstrations and experiments, including but not limited to microscopic studies, pharmaceutical lab instruction (technical quality of prepared and compounded materials), and patient care demonstrations (physical observation and physical assessment). A candidate/student-pharmacist must be able to observe a patient accurately at a distance and close at hand, noting non-verbal and verbal signals. Observation necessitates functional use of vision, hearing and somatic senses. The candidate/student-pharmacist must be capable of remaining alert and attentive at all times in the clinical setting.

**Communication**

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

**Motor Abilities**

A candidate/student-pharmacist must have sufficient motor function to carry out the basic laboratory experiments and physical assessment. The candidate/student-pharmacist must be able to carry out duties within the classroom, laboratory, pharmacy and clinic settings. Motor function must be sufficient to perform fundamental patient care, such as required for disease prevention, drug therapy monitoring, emergency treatment, general care and basic physical assessment (eg. blood pressure assessment, palpation for...
adapt to changing environments, to display effectively under stress. They must be able to work effectively as a member of a health-care team. Candidates must be able to tolerate and care of patients, and the development of responsibilities attendant to the diagnosis and judgment, the prompt completion of all intellectual abilities, the exercise of good health required for full utilization of his/her pharmacists, requires that a candidate/student pharmacist must have the ability to maintain aseptic technique in the preparation of sterile materials. This will require the ability to work under a laminar flow hood and in sterile rooms. Candidates must possess the motor function sufficient to direct and supervise the accurate compounding and preparation of medications for dispensing to patients. A candidate/student pharmacist must be able to safely and effectively operate various types of laboratory and patient care equipment such as weights and balance, a glucose meter, stethoscope and sphygmomanometer. They must be able to use computer-based information systems. These motor actions require coordination of both gross and fine muscular movements, equilibrium and functional use of the senses of touch, vision, and hearing. Additionally, some aspects of patient care require that the student-pharmacist be able to act quickly and speed of motor function may be an essential requirement.

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

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

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

Accommodations
Accepted students with a disability who believe they may require accommodations to meet these standards should contact the Campbell University Director of Access and Outreach. Students who lose the ability to appropriately meet these standards should contact the Campus Office of Access and Outreach to determine whether or not a reasonable accommodation can be made. Again, candidates pursuing the academic program who lose the ability to appropriately meet these standards and who do not seek accommodations may place themselves in academic jeopardy.

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

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

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

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

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

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

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

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

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

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

The Academic Performance and Standards Committee will review the student’s record at the end of the term of probation:
- If the SGPA and PGPA for that term are 2.20 or above, and the CGPA is 2.20 or above, the student will be released from academic probation. If SGPA and PGPA are 2.20 or above, but the CGPA is below 2.20, the student will remain on academic probation. A student remaining on academic probation for more than two consecutive semesters will be subject to suspension or dismissal.
- If a student fails to make satisfactory progress during the period of academic probation, and/or fails to correct academic deficiencies, within the prescribed time, that student will be subject to automatic suspension and may be dismissed from CPHS.

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

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

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

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

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

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

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

Students have the opportunity to appeal any decision made by the Academic Performance and Standards Committee by submitting a written petition to the associate dean for academic affairs within 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 academic affairs is final.

Remediation Policy
After a Failure Occurs
If a student fails a course despite the efforts made for early academic difficulty detection, re-taking of the course will be required.

As directed by the Academic Performance and Standards Committee (APSC), the student may take the course again in the following summer session after the original course was taken. For example, if a student fails PHAR 1XX, he/she will register for and re-take it as a summer course. This will result in additional tuition charges for the summer course, which may be assessed on a per-credit-hour basis. A student may only take the remediation course at the direction of the APSC with authorization by the CPHS Associate dean for academic affairs. The remediation course will be a Summer Session III registered course. The actual duration and schedule for the course will be determined by the course director. The Task Force recommends that the course duration meets the following recommendations: a minimum of 1 week per credit hour and a maximum of 2 weeks per credit hour.

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

The student will be required to take all course exams ON CAMPUS as offered through the 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 remediation course if it is recommended by the APSC and approved by the CPHS Associate dean for academic affairs. Students will only be allowed to take 1 summer remediation course per year. If greater than 1 course is required for remediation, the student should repeat any additional courses during the regularly scheduled Fall/Spring semester. Students may only take a summer remediation course when recommended by the APSC.

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

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

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

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

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

Delayed Graduation Policy
If a pharmacy student is required to re-take classes as a result of specific course failure or a deficiency in overall academic performance, then a delay in scheduling advanced pharmacy practice experiences (APPE) will occur and the student’s graduation will be delayed.

Voluntary course withdrawals or a temporary leave of absence will also cause a delay in scheduling APPE and a delay in graduation. Any alteration in the normal curriculum progression may affect a student’s financial aid status or qualification for education-based financial aid. For specific counseling and advice students should contact the College’s Office of Academic Affairs and the University’s Office of Financial Aid.

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

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

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

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

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

Withdrawal
A student may withdraw from a course without penalty at any time prior to the end of the fourth week of a semester. Withdrawal from a course after that period will result in a grade being assigned. Refer to the General Information section of this bulletin for detailed information about the withdrawal policy of the College of Pharmacy & Health Sciences.

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

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

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

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

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

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

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

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

To be eligible for transfer and replacement of a course in the professional curriculum, the requested course for transfer must meet all of the following requirements:

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

A student granted transfer credit will not be required to enroll or pay tuition and fees for the transferred course; however, full-time tuition is charged to all students enrolled in at least 12 semester hours. Upon approval for transfer, the student will be given credit for the transferred course on the official transcript. Credit hours for transferred courses that exceed the number of credits for the equivalent course at CPHS will not count towards elective credits in the curriculum.
A student may formally request to receive a course-waiver for a required course in the doctor of pharmacy curriculum provided the student successfully completed an upper division or graduate course that:

- Is completed from an accredited institution recognized by CPHS
- Is documented on an official transcript provided by the registrar or equivalent of the accredited institution
- Has an earned grade of 80% or higher, or a grade of “B” or greater
- Be of the equivalent general content and level of instruction as the equivalent course in the CPHS doctor of pharmacy curriculum
- 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 a recommendation to the dean whether to accept or deny the course transfer or course-waiver.

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

Grading System

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

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

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

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

Grade Reports, Records, and Transcripts

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

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

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

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

Curriculum

First Year

Semester 1

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 302 - Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 304 - Biochemistry</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 312 - Medical Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 301 - Pharmaceutical Calculations</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 305 - Pharmacy in the US Healthcare System</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 309 - Drug Information</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 331 - Pharmaceutical Care Skills</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 315 - Intro. to Pharmacy Practice I</td>
<td>0.5</td>
</tr>
<tr>
<td>PHAR 335 - Community Service I</td>
<td>0</td>
</tr>
</tbody>
</table>

Total 18.5

Semester 2

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

Total 19.5

Second Year

Semester 3

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

Total 17.5

Semester 4

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

Total 16.5

Summer (one month)

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

Total 1

Campbell University College of Pharmacy & Health Sciences.
Third Year
Semester 5

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

Semester 6

Courses                                      Credit Hours
PHAR 545/547 - Therapeutics III & IV         6
PHAR 509 - Therapeutic Drug Monitoring       4
PHAR 544 - Intro. to Clinical Research Design & Lit. 2
 Evaluation                                   2
PHAR 519 - Physical Assessment               2
PHAR 5XX - Electives                         3
PHAR 516P - Intro. to Pharmacy Practice VI    0.5
PHAR 564 - Community Service III              0
Total                                         17.5

Fourth Year
Nine Month Rotations

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

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

Course Descriptions

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

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

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

PHAR 304 – Biochemistry
Credit: 4 hours
This is a comprehensive course in biochemistry which discusses the metabolism of amino acids, carbohydrates, lipids, and nucleic acids. Principles of enzyme kinetics and regulation, bioenergetics, thermodynamics, and macromolecular structure-function relationships are presented.

PHAR 305 – Pharmacy in the U.S. Health care System
Credit: 2 hours
This course will focus on introducing the pharmacy student to the US Health care System and its components, health care systems of various foreign countries, the profession of pharmacy and the expanding roles of pharmacy and pharmacists in the health care system. Various teaching methods will be used including lectures from faculty and guest speakers, interactive activities in class, internet-based assignments, reading assignments, written reports and group project.

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

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

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

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

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

PHAR 315 – Introduction to Pharmacy Practice I
Credit: 0.5 hours per class
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student or the experiential component of the Doctor of Pharmacy Curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career paths. In addition the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio. Student pharmacists will be asked to meet various pre-experiential requirements as a component of this course (e.g., immunizations, portfolio development, HIPAA training and other requirements).
PHAR 314 – Biopharmaceutics
Credit: 3 hours
The biological and physicochemical factors of the body, drugs, and dosage forms that influence drug availability, disposition, and pharmacological and toxicological responses are presented.

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

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

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

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

PHAR 404 – Pharmaceutics I
Credit: 3 hours
This course is designed to provide the student with a basic understanding of medicinal products' physical and chemical properties of and how these properties influence the design of dosage forms.

PHAR 405 – Nonprescription Drug Therapy
Credit: 3 hours
This course is a study of various nonprescription (OTC) products commonly found in community pharmacy practice. Emphasis is placed on the problem solving process involved in patient assessment, therapeutic intervention, product recommendation(s), triage of serious health care problems to other health care settings, and patient education regarding health promotion and disease management with nonprescription medications.

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

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

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

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

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

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

PHAR 419 – Introduction to Pharmacy Practice IV
Credit: 0.5 hours per class
This series of courses are intended to expose the student pharmacist to a variety of career pathways within the pharmacy profession and to help prepare the student for the experiential component of the doctor of pharmacy curriculum. The student pharmacist will be engaged in discussions related to professionalism and pharmacy practice career paths. In addition the student will gain experience in introspection through reflection and will spend time creating an electronic professional portfolio. Student pharmacists will be asked to meet various pre-experiential requirements as a component of this course (e.g., immunizations, portfolio development, HIPAA training and other requirements).
PHAR 421 – Pharmacology & Medicinal Chemistry III  
Credit: 4 hours  
This course is designed to provide the pharmacy student with a firm foundation in the various therapeutic agents available to effectively manage various paracrine/inflammatory, gastric erosion, endocrine, and central nervous system conditions. Particular emphasis will be placed on the cellular and physiological systems that are regulated by these agents to bring about the desired therapeutic outcome. For each class of agents the prototypical drug will be emphasized with regard to mechanism of action, chemical characteristics, pharmacokinetic considerations, adverse effects and drug interactions. For the newer agents in each class significant differences from the prototypical agents will be highlighted.

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

PHAR 435 – Community Service II  
Credits: 0 hours  
CPhS requires a commitment to community service. Each student pharmacist is required to provide 80 hours of community service during the four year of enrollment at CPhS. A minimum of 10 hours must be provided in each year. In addition to the benefits to the community, this requirement provides the student an opportunity to learn the needs of the community and to develop as a professional.

PHAR 444/454 – EMT Training I/II  
Credit: 3 hours per class  
These courses recognize proficiency achieved in training by a certified instructor for emergency medical technician service. Both courses are required to prepare for EMT certification.

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

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

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

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

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

PHAR 510 – Cardiology  
Credit: 1 hour  
This elective is designed for students with an interest in cardiology. The purpose of the course is to enhance students understanding of cardiovascular pathophysiology and pharmacotherapy. Advanced concepts related to cardiovascular pharmacotherapy therapy will be emphasized.

PHAR 510P – Pharmaceutical Care for Patients with Diabetes  
Credit: 1 hour (P/F)  
This course includes a 15 hour on-line self-study (maximum time allotted) and 8 hour live training which will be offered over the last 5 weeks of the semester. The self-study modules are a review of the medical management (pharmacologic and non-pharmacologic) for diabetes and include case studies and activities that must be completed prior to attending the live training. The live training portion is designed to be application of the self-study modules. Participants will be assessed on ability to take blood pressure measurements, perform monofilament foot exams, provide insulin injection, and perform a fingerstick blood glucose using a blood glucose monitor. Case-based learning is also utilized throughout the live portion to apply knowledge of guidelines and therapeutic management (pharmacologic and non-pharmacologic). Participants must also complete an on-line final exam in order to receive a certificate of completion. Students wishing to pursue opportunities in the community or ambulatory care setting would be well-positioned with a certificate in diabetes on the CV; however, issues addressed in this program are not as intense as the information provided in the Diabetes Elective offered through Campbell.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

PHAR 528 – Experimental Design & Biostatistics
Credit: 4 hours
This course involves the application of statistical methods in health sciences. The course is intended to provide the student with basic knowledge of descriptive statistics, probability theory, hypothesis testing, and other selected statistical methods useful in the design and evaluation of clinical research investigation.
PHAR 529 – Hematology & Oncology  
Credit: 1 hour  
This course will allow students to develop a better understanding of the treatment of hematology and oncology patients. The course will start with a general review and then focus on many of the disease states that will not be covered in the therapeutics course such as leukemia, lymphoma, myeloma, blood and marrow transplant. Students will learn how to take a diagnosis and develop a treatment plan including chemotherapy regimens and their supportive care issues that go along with the treatment.

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

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

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

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

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

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

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

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

PHAR 539 – Care of the Diabetic Patient  
Credit: 2 hours  
This series of classes will deal with specific issues which complicate the day-to-day and long-term management of diabetes. Topics covered will include diabetes survival skills, diabetes in special population groups, diseases which complicate diabetes treatment, and complications of diabetes.  
Prerequisites: PHAR 501/503 strongly suggested.

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

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

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

PHAR 545/547 – Therapeutics III/IV  
Credit: 3 hours per class  
These courses are designed to illustrate the appropriate clinical application of pharmacodynamics, pathophysiology, and pharmacokinetics to a variety of common acute and chronic disease states. Emphasis will be placed on data collection, analysis, and decision-making required to optimize drug therapy.  
Prerequisites: PHAR 501/503 strongly suggested.
PHAR 546 - Anticoagulation Management II  
Credit: 1 hour  
There is today an overwhelming amount of new information regarding the comparative efficacies of newly developed anticoagulants and antithrombotic drug therapies and their optimal use in life-threatening thromboembolic disease states, specifically those in Acute Coronary Syndrome patients. This course is designed to provide students with an in-depth knowledge of anticoagulants and antithrombotic therapies, their optimal use, and strategies for monitoring and managing patients on these medications. The course will cover the pharmacology, mechanism of action, indication, and contraindications of the most commonly prescribed anticoagulants and antithrombotic agents, as well as their interactions, dosing, and management of side effects. The course will also include a review of recent clinical trials and guidelines, as well as case studies and practical exercises to help students apply their knowledge to real-world scenarios.

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

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

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

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

PHAR 552P – Medication Therapy Management (MTM) II  
Credit: 2 hours  
This course is designed to provide the student pharmacist with an in depth knowledge of medication therapy management (MTM) services. This course is designed to foster professionalism through inter-professional teamwork. Through patient interaction, student pharmacists will increase their working pharmacotherapy knowledge and will apply core principles and guidelines to direct patient care. Student pharmacists will provide MTM services to patients in a clinic or community pharmacy setting.

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

PHAR 554 – Geriatric Pharmacotherapy  
Credit: 1 hour  
This course is designed to allow the student to gain familiarity with select instruments used to assess a variety of conditions which commonly occur in the geriatric population. The course will utilize a combination of didactic lectures, case problems, and actual field use of the techniques and instruments reviewed in class. Most class meetings will have an application component to enable the student to further develop the multi-dimensional knowledge and skill-set necessary to comprehensively evaluate and monitor treatment in the older adult.

PHAR 554P – Geriatric Pharmacotherapy II  
Credit: 1 hour  
This course is designed to introduce student pharmacists to the concepts of geriatric care and build upon knowledge from pharmacotherapy lectures with a focus on older adult patients. The course will review physiologic changes and altered presentation of the elderly patient, geriatric syndromes and pharmacotherapy in the older adult. The course will utilize didactic lectures, case-based discussion and will conclude with an application-based exercise utilizing actual patients. Topics covered include psychiatric diseases, neurologic issues, consultant pharmacy, palliative care and SOAP documentation in the medical record.

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

PHAR 557 – Issues in Critical Care  
Credit: 2 hours  
This course is designed to introduce critical care principles. This course will illustrate the appropriate clinical application of pathophysiology, pharmacokinetics and pharmacodynamics in the critical care population.

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

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

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

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

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

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

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

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

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

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

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

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

**PHAR 575 – Essential Spanish for Pharmacists**
Credit: 1.5 hours
This course introduces students to basic and practical information that they can use when providing pharmacy services to Spanish speaking patients. The course covers common situations, such as greeting, patient data collection, prescription dispensing information and administration instructions. Students are not required to be fluent in Spanish.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**PHAR 605 – Ambulatory Care: Advanced Pharmacy Practice Experience**  
**Credit:** 4 hours  
The purpose of this experience is to introduce the student to clinical pharmacy practice in a patient-care setting through the management
PHAR 606 – Geriatrics: Advanced Pharmacy Practice Experience  
Credit: 4 hours  
The purpose of this experience is to introduce the student to the philosophies and practice of geriatric medicine through clinically-oriented activities. The setting for this type of APPE provides the opportunity for patient-care with geriatric patients in assisted living, skilled nursing facility or other practice setting that has a large percentage of patients age 65 or older or patients physiologically similar to geriatric individuals.

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

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

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

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

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

Experiential Training

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

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

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

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

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

Registration of Rotations and Billing

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

Due to the Office of the Registrar’s closing date for submission of fall grades (early to mid-December), students completing an IPPE in December will receive an incomplete (IC) recorded as their initial course grade. Once all rotation requirements are satisfied and the final grade is recorded in RxPreceptor, the Office of Pharmacy Experiential Education (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. 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 the IPPEs during the summer term following the second year or in December.

If a student pharmacist receives a grade of Fail (F) on an IPPE, the grade will be submitted to the registrar’s office and recorded on the student’s transcript. The student will not be
allowed to reschedule the failed rotation in the same term; therefore, the grade will remain on the transcript. If a student pharmacist is unsuccessful at either of the IPPEs, then he/she will be rescheduled for another introductory rotation of the same type either the following fall term (December), or the next summer term where applicable. The OPEE will communicate the IPPE schedule of all student pharmacists with the Office of Academic Affairs prior to the beginning of each term. The OPEE will submit grades for all IPPEs and APPEs.

Student pharmacists successfully completing all required coursework in the preceding three years, including both IPPEs are classified as P4s and can register for their P4 rotations (APPEs). A minimum of nine rotations (1440 hours) in advanced community, ambulatory care, geriatrics, internal medicine 1, internal medicine II, advanced hospital, and three electives is required. Grades for APPEs are recorded as A, B, C, or F (fail). Students usually complete their APPEs in May through April of the following year of expected graduation. All students will register according to his/her actual rotation schedule. Students will only be charged one program fee for the fourth year; one-half of the fee will be incurred in the fall term and the other half during the spring term. For example, the student below will be registered in the summer, fall, and spring terms; however, one-half of the program fee will be assessed in the fall and the other half in the spring. No program fee will be incurred in the summer.

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

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

If a student pharmacist receives a grade of F in an APPE, the grade will be recorded on his/her transcript; moreover, the student will not be rescheduled for the rotation again within the same semester preventing immediate grade replacement. Failure of an APPE does not automatically preclude progression through the P4 year.

If an APPE must be rescheduled for any reason, including but not limited to a rotation cancellation, not documenting all necessary requirements for site clearance, a medical illness, etc., the OPEE will make every effort to reschedule the rotation as soon as possible. The OPEE, however, implies no guarantee of on-time graduation if placement for a rotation is not available.

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

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

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

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

*Required rotation
Drug Information Center
Established in 1987 with a grant from GlaxoSmithKline, the Drug Information Center (DIC) is an invaluable asset to the College of Pharmacy & Health Sciences (CPHS) providing experiential training for student pharmacists and a service to health care professionals. The center receives approximately 150 calls per month, with an estimated 60% of inquiries from pharmacists.

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

Purpose
- To serve the health professions community by answering drug-related questions;
- To provide a learning center for student pharmacists, residents, and other student health care professionals in which drug information skills can be developed;
- To function as a resource center for faculty, students, and other health care professionals;
- To aid in the promotion of CPHS by offering drug information services throughout the state.

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

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

Contact
Phone: (800) 327-5467 (NC)
(800) 760-9697 Ext. 2701 (US)
(910) 893-1476 Ext. 2701
Fax: (910) 893-1476
Mobile App (iOS only): “Campbell DIC”

Residency Programs
The College of Pharmacy & Health Sciences (CPHS) offers a variety of pharmacy residency programs. Residents at CPHS are afforded the opportunity to enhance their clinical, research, teaching and critical thinking skills to meet the demands and changes occurring in the profession of pharmacy.

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

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

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

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

The service component consists of patient care rounds with one of the general adult medicine teams for a minimum of four months. The resident is responsible for providing comprehensive patient-centered care to the patients and medical team, and serves as the primary preceptor for CPHS student pharmacists. Additional time is spent with the Infectious Disease (ID) consult service, ID clinic (HIV) and elective rotations. Teaching activities consist of clinical precepting for the internal medicine and ID consult services. Didactic teaching experience is obtained through participation in the therapeutics series, ID elective, therapeutic drug monitoring, drug induced diseases, and drug literature evaluation courses at CPHS. The resident participates on various committees, attends faculty and department meetings and retreats, and assists preceptors with course coordination at CPHS.

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

PGY1 Community Pharmacy
Walgreens
CPHS offers two community pharmacy residencies. The residencies are offered in conjunction with Walgreens, located in Fuquay-Varina, N.C. and Raleigh, N.C.

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

In addition to direct patient care responsibilities, the resident is involved in the didactic and clinical training of student pharmacists and other health care professionals. The resident will complete an original research project and present the assignment at the Research in Education and Practice Symposium.
PGY1 Residencies

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

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

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

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

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

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

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

Harnett Health System
CPHS and Harnett Health System offers a PGY1 program one-year residency to develop knowledge and skills to provide pharmacotherapy for inpatients. Upon completion of the residency program, residents should be able to practice as a pharmacist clinician in the inpatient setting or be eligible for PGY2 positions of their choosing in the inpatient setting. The program will offer 2 PGY1 positions, competitive salary and benefits, as well as a travel stipend to ASHP Midyear and the Research in Education and Practice Symposium. Hartnett Health System is comprised of two hospitals, six physician offices, and seven outpatient centers.

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

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

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

The curriculum includes the last two years of studies of the entry-level PharmD program. This includes one year of didactic training followed by an additional nine months of clinical rotations. Depending on the individual’s background, variations in the curriculum may be necessary.

Effective August 2015, applications will no longer be accepted for the post-baccalaureate program and no new students will be admitted. Currently admitted and enrolled students will complete the program as scheduled.

Curriculum

First Year

Semester 1

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>PHAR 501/503 - Therapeutics I &amp; II</td>
<td>6</td>
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<tr>
<td>PHAR 528 - Experimental Design &amp; Biostatistics</td>
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</tr>
<tr>
<td>PHAR 515P - Intro to Pharmacy Practice V</td>
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<tr>
<td>PHAR 5XX - Electives</td>
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Semester 2

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<tr>
<td>PHAR 310 - Immunology*</td>
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<tr>
<td>PHAR 545-547 - Therapeutics III &amp; IV</td>
<td>6</td>
</tr>
<tr>
<td>PHAR 509 - Therapeutic Drug Monitoring</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 544 - Intro to Clinical Research Design &amp; Lit. Evaluation</td>
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</tr>
<tr>
<td>PHAR 519 - Physical Assessment</td>
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<tr>
<td>PHAR 516P - Intro to Pharmacy Practice VI</td>
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Second Year

Nine Month Rotations**

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<td>PHAR 6XX - Advanced Pharmacy Practice</td>
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<tr>
<td>Experiences (nine one-month)</td>
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<tr>
<td>PHAR 699 - Prof. Presentation Seminar</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>37</strong></td>
</tr>
</tbody>
</table>

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

**Request for exemption from up to three rotations based on prior experience may be submitted to the chair of pharmacy practice.
Department of Physical Therapy
Campbell University
College of Pharmacy & Health Sciences (CPHS)
PO Box 1090
Buies Creek, North Carolina 27506
Phone: 1-910-893-1720

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

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

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

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

Program Goals:
The Campbell University physical therapy program will:
1. 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. Delivery:
   - Practice physical therapy competently, ethically, and legally in a caring manner within a variety of practice environments
   - Practice physical therapy in an interactive fashion using innovative and adaptable evaluation and management skills to diverse patient/client populations in a variety of health care settings
   - Integrate evidence supported and outcomes based practice in a professional manner to enhance the well-being of patients/clients in a variety of health care settings
   - Collaborate as a member of an interprofessional health care team, advocating for patient/client and profession, in a variety of health care settings with an emphasis on rural areas
   - Administer, manage, and supervise in a variety of professional settings and regulatory environments

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

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

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

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

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:
- To understand each applicant as a whole person;
- To evaluate the applicant’s potential for success in the DPT program;
- To assess the candidate’s commitment and aptitude as a future practicing physical therapist.
The DPT program application can be accessed through any of the following methods:
- http://www.campbell.edu/cphs/doctor-of-physical-therapy/
- under the Admissions tab, select DPT Application
- CPHS admissions office in Maddox Hall (suite 118) on the main campus

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

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

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

**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 non-refundable deposit of $1000 to the Universities Business office, as described in the acceptance letter, to secure a position in the DPT program.
- Once the student has arrived on campus, the deposit is applied toward the first semester’s tuition and fees.

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

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

**Prerequisite Courses**
- Two semesters of human anatomy and physiology with labs (this may be taken as two combined A&P courses with lab or one anatomy course with lab and one physiology course with lab)-total 8 hours
- One semester of general chemistry with lab-total 4 hours
- Two semesters of general physics (algebra) with lab-total 8 hours
- One semester of upper level biology (300+) with or without lab-total 3-4 hours**
- One semester of statistics (math or psychology)-total 3 hours
- Two semesters of social sciences (psychology, sociology)-total 6 hours
- One semester of math (algebra or higher with trigonometry preferred)-total 3 hours
  **Up to 3-4 hours of exercise physiology can be applied to and count for the upper biology requirement. The course must be a 300+ level course.

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

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

**Financial Aid**
For information on financial aid availability and application procedures, please contact the student financial planning office at (910) 893-1310 or email financialaid@campbell.edu.
Policies and Procedures

CPHS student policies that pertain to the DPT Program:
The following list of policies can be found in the General Policies section of the CPHS academic bulletin:
- Attendance
- Complaints/Grievances
- Counseling
- Criminal Background Check
- Dress Code
- Environmental Health and Safety
- Grade Appeals
- Grade Reports, Records, and Transcripts
- Health Insurance
- Immunization
- Incident Reporting
- Inclement Weather
- Meal Plan
- Parking
- Professional Liability Insurance
- Refund
- Safety and Emergency Preparedness
- Student Health
- 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 the Carrie Rich building is regulated using an electronic ID badge system. Access is granted for each individual student by the program director through facilities services. All students will have access to the Carrie Rich building between 6am and midnight 7 days/week. The Wiggins library is open on weekends and has 24 hour study areas. The School of Osteopathic Medicine allows badge access to DPT program students between 7am and 10pm 7 days/week. Access to the anatomy laboratory will be allowed during similar hours for summer semesters only. The simulation center and other laboratories will be available between 8am and 5pm Monday through Friday. Should access outside of these hours be required, students should contact the program director.

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

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

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

Complaints Outside of Due Process for Programs
Written complaints can be taken by anyone within the College. Upon receipt of a complaint, the program director/chair is notified and expected to investigate the complaint. Upon completion of the review, the appropriate action or resolution, if any, is implemented (per Bob Cogswell, Campbell Office of Legal Affairs, 3-1-13). Anonymous complaints will not be accepted. If a faculty/staff member receives a complaint, they are to report the concern to the Department program director/chair. The director/chair has discretionary authority to gather additional information and to make a judgment about the appropriate action or the need for involvement of the Dean or other University official. Should the complaint involve the program director/chair, the written grievance should be submitted to the Dean of the College of Pharmacy and Health Sciences. Internal policies are in place within the University and College to protect complainants from retaliation.
Complaints regarding the Doctor of Physical Therapy Program should be addressed to: Campbell University Program Director-Department of Physical Therapy P.O. Box 1090 Buies Creek, NC 27506-1090

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

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

campbell.edu/cphs | 73
Honor Code
Refer to the General Information section of this academic bulletin for the Honor Code. Physical therapy students are required to read and sign the Honor Code, attesting that they understand the code, that they have read and understand the bulletin, and will abide by it. A signed copy of the code will be kept in the students file.

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

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

Upon admission, a student who discloses in writing a properly certified disability may receive reasonable accommodation, however, he/she must be able to perform the essential functions within the curriculum and the described standards listed below. Formal disclosure should be made in the Office of Student Support Services, 227 Main Street, Buies Creek, North Carolina 27506.

Candidates for admission to and matriculation from the Campbell DPT program should possess, at a minimum, the following abilities:

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

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

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

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

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

Academic Standards
Reports on academic performance and progress are generated at the mid-term and completion of each semester. The DPT program core faculty meets at the end of each academic term, or as necessary, to discuss the academic performance of all students. Any discussions regarding type of academic deficiency and remedy occurs with development of an action plan (if remediation is required; see below for remediation process) and draft of a letter from the program director stating the specific academic standing described in the following sections. The letter will be provided to the student via email and hard copy by mail. The letter will contain the following:

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

Core faculty is actively involved in promoting student retention through annual advisement sessions. A modified generic abilities document will be used to guide the process. Advisement can occur more frequently (e.g. professionalism, behavioral, or academic concerns) should the need arise. Mechanisms are in place to encourage students to seek assistance for academic performance using StarFish and Examsoft programs.

Retention and Promotion Criteria
Full-time students enrolled in the doctor of physical therapy program at the College of Pharmacy & Health Sciences (CPHS) are
expected to make satisfactory academic progress toward completion of the degree requirements. Satisfactory academic progress is defined as successful completion of didactic and experiential training in the prescribed time and maintenance of a ≥ 2.8 cumulative grade point average (GPA).

Students who fail to maintain satisfactory academic progress in the professional program are automatically placed on academic probation. They may be required to participate in academic counseling, be enrolled in a remedial program of study, or suspended/dismissed according to the policies described in subsequent sections. Students, who fail to maintain good academic standing at the completion of a semester prior to a semester requiring a clinical internship, may not be allowed to participate in the clinical education portion of that semester. The student would need to undergo a remedial course of study, with successful completion, prior to engaging in the internships (DPT 800, 802, 804). In the event remediation is not successful, students cannot progress to the clinical internship. Such actions will be recommended by the DPT Academic Performance & Standards committee and program director, with notification to the Associate dean for academic affairs. The student will be notified of these actions by the director of the DPT program.

Students may need to take leave from the DPT program for non-academic reasons considered and approved by the program director on a case-by-case basis (e.g. medical illness, financial, etc). Should a student be unable to attend classes for ≥ 2 consecutive weeks for a reason approved by the program director, disengagement from the program will be necessary. Should absence occur during clinical internships, see policies in Clinical Education Manual. The length of disengagement and any requirements for reengagement will be outlined in a letter from the program director along with a face-to-face meeting. The length of disengagement cannot be greater than 3 consecutive semesters.

The following contains a description of the types of academic standing within the DPT program:

1. Good Academic Standing
   Students will be considered in good academic standing providing:
   • Cumulative GPA ≥ 2.8
   • Passing grades for all clinical/experiential training
   • No violations of student honor code or code of conduct have occurred.

2. Remediation
   Students who fail to meet academic standards within a given course or clinical/experiential rotation may be required to remediate coursework and/or attend another clinical/experiential training. Students will require remediation for any patient safety issue throughout the curriculum. Students must initiate remediation should a grade of < 70% or failure on any examination within a given course. The content of remediation will be directed by the course instructor within a week of receiving a grade.
   Successful remediation of a practical exam must occur in the provided time and only a single attempt is allowed. If the student is not successful he/she may be placed on academic probation or suspension.

   Should a student fail to remediate academic performance, or there are any behavioral and/or non-academic reasons preventing them from participating in regularly scheduled clinical experience or internship, this rotation must be remediated prior to graduation from the program. Should a student fail a clinical/experiential rotation, this rotation must be remediated prior to graduation from the program. In most cases, this will need to be completed at the end of the program thereby increasing the length of the program for students in this situation. With fixed date licensure testing, students in this situation may fail out of sequence and will not be able to sit for the licensure examination for several months after graduation. Upon successful completion, the student will graduate assuming all didactic courses have been completed. See Graduation after Deceleration policy.

   If the student is unable to successfully pass a clinical/experiential rotation/internship during the program, the student will be out of sequence in the didactic portion and may require temporary disengagement from the program (necessitating placement on academic suspension) until rejoining in the normal curriculum sequence. A student failing more than one clinical/experiential rotation will be dismissed from the program.

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

   A student will be placed on academic probation for:
   • Failure to maintain a cumulative GPA of ≥ 2.8
   • A grade of D in any single course
   • Failure to complete any degree requirement at the prescribed time without prior approval

   Depending on the nature of the academic deficiencies and overall academic record, a student placed on academic probation may or may not be permitted to continue in the regular sequence of the professional curriculum. Students cannot be on academic probation more than two times throughout the program and may not be on probation for more than 2 consecutive semesters. Students who fail to complete the criteria for lifting academic probation will be considered for suspension or dismissal from the DPT program.

   The core DPT Academic Performance & Standards committee and director will review the student’s record each semester and again at the end of the term of probation. A recommendation will be made to the program director to restore good academic standing if:

   1. The cumulative GPA returns to 2.8 or above within 2 consecutive semesters being placed on probation, the student will be released from academic probation.
   2. Successfully completed a deficient clinical/experiential training and recommendation for a return term/year for the program

A recommendation will be made to the program director to suspend/dismiss if while on academic probation:

   1. A student makes a “D” or below in any course.
   2. A student fails to correct academic deficiencies within the prescribed time.

4. Academic Suspension
   Academic Suspension from the DPT program and CPHS occurs when a student:
   • Has failed to make satisfactory progress as demonstrated by a cumulative GPA less than 2.80, or received a grade of “D” in any course during a period of academic probation.
   • Has academic deficiencies which preclude continuation in a normal program of study, but may be expected to be able to complete the requirements for the degree under a modified program of study with or without remedial courses.

Suspensions are imposed for a specified period of time and must not exceed one year. A student on academic suspension is not allowed to continue the standard course of study. The DPT program director will specify the length of time of the suspension, remedial work required for reinstatement, and the program of study required upon re-instatement in consultation with the DPT Academic Performance & Standards committee. The CPHS Associate dean for academic affairs may be consulted as needed.

The core DPT Academic Performance & Standards committee and director will review the student’s record each semester and again at the end of the term of probation. A recommendation will be made to the program director to restore good academic standing if:

   1. The cumulative GPA returns to 2.8 or above within 2 consecutive semesters being placed on probation, the student will be released from academic probation.
   2. Successfully completed a deficient clinical/experiential training and recommendation for a return term/year for the program
5. 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 make satisfactory progress during a period of academic probation or suspension;
- Has an academic deficiency which precludes continuation in the prescribed program of study, and may not reasonably be expected to complete the requirements of the degree.

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

Academic Status Appeals
At the end of each academic term, the DPT director will notify the DPT Academic Performance and Standards Committee of all students enrolled in DPT program that qualify for academic probation, suspension, or dismissal. The DPT program director notifies each student who does not meet the academic standards as defined by the academic regulations at CPHS. The College’s associate dean for academic affairs is also notified for any student at risk of suspension/dismissal.

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

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

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

Delayed Graduation Policy
If a Physical Therapy student is required to re-take classes as a result of specific course failure or a deficiency in overall academic performance, then a delay in scheduling Physical Therapy clinical experiences or matriculation through the curriculum will occur and the student’s graduation may be delayed.

Voluntary course withdrawals or a temporary leave of absence may cause a delay in scheduling Physical Therapy clinical experiences, progress through the curriculum, and a subsequent delay in graduation. Any alteration in the normal curriculum progression may affect a student’s financial aid status or qualification for education-based financial aid. For specific counseling and advice, students should contact the College’s Office of Academic Affairs and the University’s Office of Financial Aid.

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

Graduation after Deceleration
DPT students who decelerate due to approved medical leave, and are in good academic standing, may walk at the graduation ceremony with their original cohort if they lack no more than six hours of credit (one clinical rotation). The missing credit must be completed no later than March 15 of the original graduation date. Students who lack more than six hours of credit will walk at the next graduation ceremony after completion of their outstanding requirements.

Students who decelerate will receive their degree at the next University awarding period; either the May, August, or December graduation dates. Students may not sit for their FSBPT licensure examination until after the degree has been awarded. With fixed date testing, the FSBPT application is due at least 6 weeks prior to testing date. See https://www.fsbt.org/ForCandidatesAndLicensees/NPTE/FixedDateTestingInfo/index.asp for available testing dates.

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

Transfer Students
CPHS DPT does not accept transfer students directly into the DPT program.

Students currently enrolled in another DPT program in the United States seeking admission into the Campbell DPT program will be asked to apply. Interested individuals must follow the procedures for admission. Applicants must be in good academic standing and have a letter from the dean of their institution supporting the request. These admissions decisions will be handled in the same manner as all other applicants to the College by the actions of the Admissions Committee.

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

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

Grading System
The following arbitrary grading scale is utilized for the DPT program:
Grade
A  90-100
B  80-89.99
C  70-79.99
D  60-69.99
F  59.99 or below
P  Pass
NP No Pass
I Incomplete

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

A student may appeal a grade within a period of one semester from the semester in which the grade was assigned. No changes to the transcript will be made after a semester period unless a professor acknowledges in writing that an error in grade reporting has occurred. An instructor or director initiated inquiry/request will be remediated and corrected at any time.

Curriculum
Campbell University’s Doctor of Physical Therapy Program is a 36 month graduate degree program with 26.5 months of didactic education and 9.5 months of supervised clinical internships. Graduates will receive the Doctor of Physical Therapy (DPT) degree upon successful completion. There is a one-week summative session before graduation. The program starts in January with graduation in December. Most didactic courses are held on the main campus with an online licensure preparation course completed while on clinical internships in the final year of study.

The DPT program curriculum is a competency-based graduate education (minimum required skills for physical therapist education and normative model of PT education) curriculum based on a hybrid model pulling from traditional, lifespan, and problem based learning. The sequence of courses is designed to start with foundation courses in the basic sciences, professional development, and early clinical skills. Following the initial foundational coursework, subsequent courses teach clinical assessment and intervention, medical, surgical and pharmacy concepts in patient management from a population based lifespan perspective. Integrated curricular themes in service-learning and early clinical experiences, therapeutic exercise, and approach to patient care using a lifespan model is designed to enhance student learning and promote confidence in application of skills and didactic knowledge. Clinical reasoning courses are designed to enhance student interaction through problem-based learning, application of concepts/skills, and critical interpretation of evidence. The integrated service learning and clinical experiences are designed to encourage inter-professional interaction and collaboration. Assessment of students in the didactic/classroom years is by written examinations, performance on laboratory practical examinations, OSCE, reflective narrative, professional portfolio, and participation in small group activities.

Three clinical rotations occur throughout the curriculum with a six-week introductory internship in the spring of the second year. The remaining clinical internships occur in the third program year with durations of 16 weeks each for a total of 38 weeks of clinical training. Students complete clinical experiences and service learning in rural locations with most completing a clinical internship in a rural location. Clinical internships can be completed in an acute/subacute, neuromuscular, musculoskeletal, general practice, and specialty settings. Specialized settings may include burn/wound care, aquatic, industrial/vocational, and VA/military locations, home health, and school systems. Evaluation of clinical-year students includes a preceptor and student self-assessment of student performance using the clinical performance instrument (CPI), reflective narratives on patient care experience/delivery, case study presentations, and written examinations to prepare for licensure.

All students complete all didactic elements in the program at the same time. All students complete the required clinical experiences. The only elective study available in this curriculum is spring semester of the third year.

Please visit www.campbell.edu/pt for the most up-to-date curriculum information.
<table>
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<tr>
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<th>Credit Hours</th>
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<tbody>
<tr>
<td>Spring 1</td>
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<tr>
<td>DPT 700 - Clinical Biomechanics</td>
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<tr>
<td>DPT 702- Principles of Inquiry</td>
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<td>DPT 720- Health &amp; Wellness</td>
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<td>DPT 750- Life Span Continuum I</td>
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<td>DPT 752- Tests, Measures &amp; Mobility</td>
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<td>DPT 730- Service Learning 2</td>
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<td>DPT 756- Therapeutic Exercise 1</td>
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<td>DPT 760- Hospital Based Practice</td>
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<td>DPT 766- Therapeutic Exercise 2</td>
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<td>DPT 768- Cardiopulmonary Practice</td>
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<td>DPT 770- Orthotics/Prosthetics</td>
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<td>DPT 772- Life Span Continuum 2 (pediatric)</td>
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<td>DPT 788: Clinical Reasoning 3</td>
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<td>DPT 804- Clinical Internship 3 (16 weeks)</td>
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Total Credit Hours: 117
Course Descriptions

DPT 700: Clinical Biomechanics
Credit: 4 Hours
This course will discuss and prepare students for clinical application of tissue and structural biomechanics within the musculoskeletal system. A detailed analysis of individual joint systems and applied biomechanics concepts will be discussed. Osteo and arthrokinematic movements within joint systems will be presented and discussed with clinical application in a laboratory environment using surface anatomy/palpation.

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

DPT 704: Human Anatomy
Credit: 5 Hours
This one semester integrated study of human anatomy encompasses the gross morphology, developmental and histological aspects of the body along with the introduction to clinical anatomy. The course prepares the students for physical therapy practice with an understanding of functional human anatomy. The unit includes the regional dissections with the emphasis on the musculoskeletal, nervous, circulatory and respiratory systems. The course consists of a series of lectures and labs organized in a regional approach.

DPT 706: Exercise Physiology
Credit: 2 Hours
This course is designed to provide students with an overview of bioenergetics in addition to a study of acute and chronic physiologic adaptations to aerobic, anaerobic and strengthening exercise. The selection and application of therapeutic exercise and prescription will be emphasized in relation to physical impairments (body structure and function) and functional limitations (activities) frequently encountered across the lifespan in physical therapy.

DPT 708: Human Pathophysiology
Credit: 4 Hours
This course provides a survey of human physiology and covers key concepts related to the function and biological control of cells, tissues, organs and body systems. Basic principles of physiology and pathology are addressed with focus on the coordinated functions and activities of specific body systems: nervous, musculoskeletal, cardiorespiratory, immune, endocrine, gastrointestinal, and other body systems. Emphasis is given to normal system function, interaction and homeostasis, the ways that these contribute to the functions of the body as a whole. Abnormal function, interaction, and pathology will also be addressed along with injury, inflammation, and tissue repair.

DPT 710: Pharmacology
Credit: 2 Hours
This course provides an introduction to pharmacology principles and pharmacokinetics. The focus will be on drugs (by class) effect 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, and an introduction to chemotherapy for infectious and neoplastic disease will be deliberated.

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

DPT 714: Motor Control
Credit: 3 Hours
This course examines perceptual, motor, and sensory contributions to feedforward and feedback postural control, balance, and movement strategies and promotes critical thinking as students use their understanding to develop educated interventions for movement pathologies with neurologic origins. Specific neurologic pathologies are introduced as patient examples of movement dysfunction from which students will develop and plan treatment strategies. The course is structured in three blocks covering theoretical frameworks of motor control, postural control, and mobility functions.

DPT 720: Health & Wellness
Credit: 1 Hour
This course provides foundational concepts of health and wellness promotion in the individual and the community, and addresses the role of the physical therapist in health and wellness promotion. The course will address physical, mental, and spiritual facets of wellness and their roles on fitness, nutrition, and body composition. This course will include the relationship between health and wellness on disease and fitness throughout the lifespan from birth to death.

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

DPT 724: Service Learning 1
Credit: 1 Hour
This course starts a series of integrated service learning and early clinical experiences for students to practice using verbal and non-verbal communication skills within the internal and external community, communication between health professions, develop professional behavior, and survey the benefits of service related activities in rural communities. Inter- professional interaction and peer learning will be encouraged with any service activities geared to benefit community at large.
DPT 726: Clinical Experience 1
Credit: 1 Hour
This is the first in a series of two integrated clinical learning experiences and associated service courses for students prior to their initial full-time clinical rotation. This course will allow students to: interact in physical therapy and inter-professional activities; practice communication skills; practice tests and measures; physical agents, develop professional behavior; identify legal and ethical components of physical therapy; and observe medical conditions associated with health wellness and pathology. Inter-professional interaction and peer learning will be encouraged with all clinical experiences.

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

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

DPT 732: Clinical Experience 2
Credit: 1 Hour
This is the second in a series of two integrated clinical learning experiences and associated service courses that occurs the semester after the initial full-time clinical rotation. This course builds upon students’ previous clinical experiences by allowing them exposure to different practice settings and additional inter-professional activities. Students will enhance their: communication skills; tests and measures skills; physical agents utilization; professional behaviors; ability to identify legal and ethical components of physical therapy; and understanding of medical conditions associated with health wellness and pathology. Inter-professional interaction and peer learning will be encouraged with all clinical experiences.

DPT 734: Service Learning 3
Credit: 1 Hour
This is the third in a series of three integrated service learning courses and associated early clinical experiences for students to practice using verbal and non-verbal communication skills within the internal and external community, communication between health professions, develop professional behavior, and survey the benefits of service related activities in rural communities. Interprofessional interaction and peer learning will be encouraged with any service activities geared to benefit community at large.

DPT 736: Administration & Management
Credit: 3 Hours
This course will provide an in-depth study of the organization and administration of physical therapy services, including organizational and administrative principles, employment practices and personnel management, marketing, facility planning, financial stewardship, reimbursement and outcomes. Current payer methodologies and case management will be reviewed. Students will learn the practical aspects of managing physical therapy services, from an initial business plan concept to long term strategic planning. Current regulatory, legal and policy and procedures that impact practice management will also be presented.

DPT 752: Tests, Measures, and Mobility
Credit: 4 Hours
This course contains a 3 block modular series encompassing: 1) patient assessment techniques, 2) patient mobility, transfers, gait assistance, and assistive devices, and 3) physical agents and electrotherapeutic intervention. Assessment techniques will be discussed and practiced and can include universal precautions and aseptic technique, vital signs for assessment of physiologic status, goniometry and muscle length/strength testing, and posture. Patient mobility will be discussed and practiced and may include discussion of ADA, positioning/draping, transfers, assistive devices, and safety in all environments. Gait will be discussed from an intervention and prescriptive perspective with an emphasis on appropriate guarding and safety precautions. The science and reasoning behind use of thermal agents, electrotherapeutics, traction, compression, hydrotherapy, and ultraviolet, lasers, and lights will be discussed and practiced. This course serves as a foundation for clinical and physical therapy science courses later in the curriculum sequence. A solid understanding of this material is necessary to ensure success in future problem based learning activities.

DPT 754: Burn & Wound Management
Credit: 2 Hours
This course will cover the basic science of normal physiology of tissue repair related to the pathology of burns and wounds. Psychosocial issues related to wound healing will be discussed. Knowledge of anatomy as well as the integumentary, vascular; neuromuscular and peripheral nervous systems will be required to properly identify various types of wounds including but not limited to: lacerations, ulcers, amputations, punctures, gun-shots, chemical, electrical and fire wounds. Different tools to measure wounds appropriately will be utilized. Various types of treatment such as debridement, protective garments, splinting devices, surgical intervention and chemical agents will be discussed. The student will also develop skills to prepare a sterile versus a clean environment as well as use personal protective equipment. The development of strategies to deal with special populations related to wounds such as obesity, diabetes, amputees and the indigent will be interwoven throughout this course.
Finally the management and business details related to wounds including coding principles will be discussed.

DPT 756: Therapeutic Exercise 1
Credit: 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 758: Neurology Practice
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 760: Hospital Based Practice
Credit: 3 Hours
This course will present educational material related to patient management encountered in diverse hospital settings. Hospital settings to be discussed will include: general medical, surgical, emergency room, intensive care, progressive care, critical care, sub-acute, rehabilitation, cardiac care, labor and delivery, and orthopedic sections. Items related to patient management to be discussed, analyzed and practiced will include chart review, safe patient handling techniques, discharge planning as well as documentation. The process of practicing autonomously within an integrated multidisciplinary team will be emphasized. Evaluation, assessment and treatment techniques typically encountered by physical therapists will be discussed and practiced for patients across the lifespan. The continuum of care model will be utilized. It will be essential for the student to understand how to operate within a complex environment involving instrumentation, life sustaining equipment, tubes, lines and monitoring machines. It will be important to recognize the value of diagnostic testing, lab values, contraindications and precautions.

DPT 762: Musculoskeletal Practice
Credit: 3 Hours
This course addresses evaluation and management skills within the practice of musculoskeletal physical therapy. Students will develop a patient profile, apply a diagnostic hypothesis, identify relevant tests and measures to determine the appropriateness of physical therapy management, and classify the patient/client according to the physical therapy diagnosis. Management strategies will address the complete biopsychosocial needs of the patient. Specific approaches to be addressed will include education, activity modification, and physical interventions (manual therapy, therapeutic exercise & modalities). Inter-professional communication will address the patient/client presentation lying outside the physical therapy scope of practice. A variety of learning activities will be incorporated into the presentation of course material, including lecture, demonstration, lab practicums, case studies, independent problem assignments, and role-playing. All course information will be available Blackboard, where you will be able to constantly interact at a sophisticated level with the course information.

DPT 764: Clinical Reasoning 1
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 766: Therapeutic Exercise 2
Credit: 3 Hours
This course discusses the mechanisms and application of therapeutic exercise to normal and abnormal populations with specific focus on special populations and disorders. Therapeutic exercise will be applied in the development of a rehabilitation program and appropriate progression for impairments, pain and selected movement disorders.

DPT 768: Cardiopulmonary Practice
Credit: 3 Hours
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.

DPT 770: Orthotics & Prosthetics
Credit: 2 Hours
This course provides an overview and evidence supported approach to orthotic and prosthetic use in patient populations. Gait assessment before and after orthotics and prosthetics intervention will be discussed and practiced. Integumentary, neurological, and vascular considerations will be discussed in patient populations that benefit from orthotics and prosthetics intervention.

DPT 772: Lifespan Continuum 2 (Pediatrics)
Credit: 3 Hours
This course will develop intermediate to entry-level skills in the evaluation and management of the pediatric 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 774: Lifespan Continuum 3 (Pediatrics)
Credit: 4 Hours
Lifespan Continuum 3 builds upon the clinical practice courses with application of examination- and evidence-based foundational interventions from previous courses. These are applied to specific pathologies across the lifespan within the lifespan continuum thread. While applying interviewing, examination, and assessment techniques to pediatric patients with frequently encountered pathologies across the lifespan, students are learning new interventions (moderate and advanced levels) and handling techniques. Students have active learning, application, and problem solving sessions throughout the courses to address all interventional modalities that involve use of patients (playing themselves), simulated patients, and student pairs or faculty acting out cases. Lifespan courses are designed to mimic patients seen in clinical practice that increase in complexity from simple to complex within each primary practice domain. While Lifespan 2 facilitates student learning of screening and assessment skills appropriate to common diagnoses encountered in pediatric clinical practice, Lifespan 3 addresses treatment, including management of additional diagnoses not addressed in Lifespan 2, and encourages students to examine existing evidence for interventions commonly used in the practice of pediatric physical therapy.

DPT 776: Lifespan Continuum 2 (Adult)
Credit: 3 Hours
This course will develop intermediate to entry-level skills in the evaluation and management of adults aged 18-64. Students will recognize key neuromusculoskeletal 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 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. This course will feature faculty as facilitators. After synthesizing basic preparatory information, students will be expected to research health conditions and lifestyle factors, 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 examination and treatment sequences that build on prior course-work in these areas. Supplementary lectures and lab demonstrations will provide instruction of new concepts and skills where needed.

DPT 778: Lifespan Continuum 3 (Adult)
Credit: 4 Hours
Lifespan Continuum 3 builds upon the clinical practice courses with application of examination and evidence-based foundational interventions from previous courses. In this course, these are applied to specific pathologies which most commonly occur during adulthood. Students will be applying previously learned interviewing, examination, and assessment techniques to patients with pathologies commonly seen in adulthood while learning new interventions (moderate and advanced levels), handling techniques and expanding management principles for previously encountered pathologies. Lifespan courses are designed to mimic patients seen in clinical practice that increase in complexity from simple to complex within each primary practice domain. While Lifespan 2 facilitates student learning of screening and assessment skills of common diagnosis encountered in adult clinical practice, Lifespan 3 addresses treatment, including management of additional diagnosis not addressed in Lifespan 2, and encourages students to examine existing evidence for interventions commonly used in the practice of adult physical therapy.

DPT 780: Lifespan Continuum 2 (Geriatric)
Credit: 3 Hours
This course will develop intermediate to entry-level skills in the evaluation and management of adults aged 65+. Students will recognize key neuromusculoskeletal health conditions and lifestyle factors that confer 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 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. This course will feature faculty as facilitators. After synthesizing basic preparatory information, students will be expected to research health conditions and lifestyle factors, 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 examination and treatment sequences that build on prior course-work in these areas. Supplementary lectures and lab demonstrations will provide instruction of new concepts and skills where needed.

DPT 782: Lifespan Continuum 3 (Geriatric)
Credit: 4 Hours
Lifespan Continuum 3 builds upon the clinical practice courses with application of examination and evidence-based foundational interventions from previous courses. In this course, these are applied to specific pathologies which most commonly occur in geriatric patients. Students will be applying previously learned interviewing, examination, and assessment techniques to patients with pathologies commonly seen in older adults while learning new interventions (moderate and advanced levels), handling techniques and expanding management principles for previously encountered pathologies. Lifespan courses are designed to mimic patients seen in clinical practice that increase in complexity from simple to complex within each primary practice domain. While Lifespan 2 facilitates
student learning of screening and assessment skills of common diagnosis encountered in adult clinical practice, Lifespan 3 addresses treatment, including management of additional diagnosis not addressed in Lifespan 2, and encourages students to examine existing evidence for interventions commonly used in the practice of geriatric physical therapy.

DPT 784: Clinical Reasoning 2
Credit: 1 Hours
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. An introduction to terminal EBM projects will be presented along with formation of groups and topic areas. Student groups will create a detailed outline for their selected condition and present to peers. The patient assessment and clinical reasoning section will utilize collaborative small groups and student pairs to solve simulated clinical cases across the lifespan in the primary PT practice domains (cardiopulmonary, musculoskeletal, and neuromuscular) from a continuum of acute to chronic and simple to complex. Problem-based and case-based learning activities will be incorporated with simulated patients to develop critical thinking and reasoning skills, practice examination elements, to establish a physical therapy diagnosis, prognosis, and plan of care that incorporates the ICF model. Students will orally present cases to their peers and answer questions related to their clinical reasoning processes and resultant plans of care along with carrying out portions of the plan of care under peer scrutiny. Electronic health databases and documentation software will be used in this course.

DPT 786: Special Populations
Credit: 4 Hours
This course involves continued study of selected practice settings and patient populations. The first portion of the course addresses unique psychosocial, assessment, management, and documentation/reimbursement needs of women’s and men’s health. Concepts in industrial rehabilitation will be covered to include: employment screening, functional capacity evaluations, rehabilitation requirements, work site analysis, and OSHA reporting requirements related to environmental safety and health. The course ends with discussion of home health care delivery and the unique practice aspects of rural health care. Other items for discussion may include military/VA practice settings and rehabilitation considerations of this population.

DPT 788: Clinical Reasoning 3
Credit: 1 Hour
The evidence-based medicine section will apply previously taught foundational research skills at searching the literature, critically appraising the results through use of validated checklists and inventories of research quality and bias. Written assessment of evidence using the PICO method to answer clinical questions will be utilized along with presentation of mini-evidence summaries for health conditions through a critically appraised topic paper. Student groups will provide a presentation to peers and in an open public forum related to conditions across the lifespan. The presentation is comprehensive, evidence based, and entails all elements of PT practice including background information and typical patient presentation. The patient assessment and clinical reasoning section will utilize collaborative small groups and student pairs to solve simulated clinical cases across the lifespan in the primary PT practice domains (cardiopulmonary, musculoskeletal, and neuromuscular) from a continuum of acute to chronic and simple to complex. Problem-based and case-based learning activities will be incorporated with simulated patients to develop critical thinking and reasoning skills, practice examination elements, to establish a physical therapy diagnosis, prognosis, and plan of care that incorporates the ICF model. Students will orally present cases to their peers and answer questions related to their clinical reasoning processes and resultant plans of care along with carrying out portions of the plan of care under peer scrutiny. Electronic health databases and documentation software will be used in this course. The final comprehensive, graded OSCE will be completed as part of this course.

DPT 790: Imaging in Physical Therapist Practice
Credit: 2 Hour
This course will cover the basic science behind multiple imaging modalities (x-rays, MRI, CT, Doppler, PET scan, arthrograms, DUS, etc), positives and negatives of each intervention, and how and when to refer for imaging services or consultation. The most common views and anatomical structures will be identified by joint/region/system that may include: anatomy of bone, joint, cartilage, soft tissue, CNS structure, and cardiovascular systems. Clinical reasoning algorithms for assistance with imaging selection and interpretation will be discussed and practiced through case studies. Evidence based utilization of imaging will be discussed and practiced along with impact of overutilization on health care costs. The American College of Radiology guidelines will be implemented throughout along with validated clinical decision rules.

DPT 792: Assistive and Adaptive Technology
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 794: Licensure Preparation
Credit: 1 Hours
This course is designed to assist students with formal licensure preparation. Students will review areas of study within the FSBPT content areas and take quizzes with timed limitations that mimic the licensure examination. Questions will be formatted to mimic the licensure examination. Activities may include group discussion, self-study using licensure preparation guides, and self-assessment within FSBPT content areas through quizzes on Blackboard. A week long summative session that includes a licensure preparation course is included prior to graduation.

DPT 796: Contemporary Topics in Musculoskeletal Physical Therapy
Credit: 2 Hours
This course expands upon existing knowledge and provides students with advanced theory and skills in the evaluation and management of various topics within musculoskeletal physical therapy. Different topics will be addressed, representing areas that are either early in their development within the physical therapy profession or that are not widely addressed within the entry-level curriculum. Specific topics to be covered include: trigger point dry
needling, strain-counter-strain, muscle energy technique, and advanced spinal manipulation techniques. This will be a student driven course, where information will be researched and presented by students, with faculty leading problem solving sessions to deal with complex patient issues.

**DPT 797: Independent Study**  
Credit: 2 Hours  
This course is designed to allow flexibility for select students to participate in research with CPHS faculty members. Depending on the stage of faculty research, students will gain exposure to research qualifications (i.e. 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.

A variety of learning activities and experiences will be incorporated into the course. All course information will be available on Blackboard, where you will be able to constantly interact at a sophisticated level with the course information.

**DPT 799: Gait and Posture**  
Credit: 2 Hours  
This course expands upon existing knowledge and provides students with advanced theory and skills in gait and posture assessment. A focus on understanding the foundations of normal and pathological function will underlie gait and posture components of the course. The course will be organized by task and will address the biomechanical, metabolic and neuromuscular aspects associated with both gait and posture. The design of the course will address normative function followed by problem-based clinical scenarios and assessments.

**DPT 800: Clinical Internship 1**  
Credit: 3 Hours  
Six weeks of full-time experiential training (approximately 240 hours) in a physical therapy practice setting will occur. Students have the opportunity to apply and integrate patient evaluation, examination, assessment, and interventional skills in a clinical setting under the supervision of clinical instructors in order to develop entry-level competencies as defined by the clinical performance instrument (CPI). Rotations for DPT 800 may involve general hospital, skilled nursing, outpatient orthopedic, or home health settings to emphasize application of musculoskeletal, cardiopulmonary, and basic care skills learned in the first year.

**DPT 802: Clinical Internship 2**  
Credit: 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.

**DPT 804: Clinical Internship 3**  
Credit: 8 Hours  
Sixteen weeks of full-time experiential training (approximately 640 hours) in a physical therapy practice setting will occur. Students have the opportunity to apply and integrate patient evaluation, examination, assessment, and interventional skills in a clinical setting under the supervision of clinical instructors in order to develop entry-level competencies as defined by the clinical performance instrument (CPI). Rotations for DPT 804 may include acute care, musculoskeletal, neuromuscular, or elective.

**Competencies for Graduates**  
Physical Therapy Programs are held accountable in ensuring students meet the following professional practice expectations at the end of didactic and clinical training. Campbell’s DPT program contains assessment methods to ensure this process by tying examination questions throughout the program to specific practice expectations. The expectations are as follows:

**Professional Ethics, Values and Responsibilities**

- **7D1.** Adhere to legal practice standards, including all federal, state, and institutional regulations related to patient/client care and fiscal management.
- **7D2.** Report to appropriate authorities suspected cases of abuse of vulnerable populations.
- **7D3.** Report to appropriate authorities suspected cases of fraud and abuse related to the utilization of and payment for physical therapy and other health care services.
- **7D4.** Practice in a manner consistent with the APTA Code of Ethics.
- **7D5.** Practice in a manner consistent with the APTA Core Values.
- **7D6.** Implement, in response to an ethical situation, a plan of action that demonstrates sound moral reasoning congruent with core professional ethics and values.
- **7D7.** Communicate effectively with all stakeholders, including patients/clients, family members, caregivers, practitioners, interprofessional team members, consumers, payers, and policymakers.
- **7D8.** Identify, respect, and act with consideration for patients’/clients’ differences, values, preferences, and expressed needs in all professional activities.
- **7D9.** Access and critically analyze scientific literature.
- **7D10.** Apply current knowledge, theory, and professional judgment while considering the patient/client perspective, the environment, and available resources.
- **7D11.** Identify, evaluate and integrate the best evidence for practice with clinical judgment and patient/client values, needs, and preferences to determine the best care for a patient/client.
- **7D12.** Effectively educate others using teaching methods that are commensurate with the needs of the learner, including participation in the clinical education of students.
• 7D13. Participate in professional and community organizations that provide opportunities for volunteerism, advocacy and leadership.
• 7D14. Advocate for the profession and the health care needs of society through legislative and political processes.
• 7D15. Identify career development and lifelong learning opportunities, including the role of the physical therapist in the clinical education of physical therapist students.

Patient/Client Management/Screening
• 7D16. Determine when patients/clients need further examination or consultation by a physical therapist or referral to another health care professional.

Examination, Evaluation and Diagnosis
• 7D17. Obtain a history and relevant information from the patient/client and from other sources as needed.
• 7D18. Perform systems review51.
• 7D19. Select, and competently administer tests and measures appropriate to the patient’s age, diagnosis and health status including, but not limited to, those that assess:
  a. Aerobic Capacity/Endurance
  b. Anthropometric Characteristics
  c. Assistive Technology
  d. Balance
  e. Circulation (Arterial, Venous, Lymphatic)
  f. Self-Care and Civic, Community, Domestic, Education, Social and Work Life
  g. Cranial and Peripheral Nerve Integrity
  h. Environmental Factors
  i. Gait
  j. Integumentary Integrity
  k. Joint Integrity and Mobility
  l. Mental Functions
  m. Mobility (including Locomotion)
  n. Motor Function
  o. Muscle Performance (including Strength, Power, Endurance, and Length)
  p. Neuromotor Development and Sensory Processing
  q. Pain
  r. Posture
  s. Range of Motion
  t. Reflex Integrity
  u. Sensory Integrity
  v. Skeletal Integrity
  w. Ventilation and Respiration or Gas Exchange
• 7D20. Evaluate data from the examination (history, health record, systems review, and tests and measures) to make clinical judgments.
• 7D21. Use the International Classification of Function (ICF) to describe a patient’s/client’s impairments, activity and participation limitations.
• 7D22. Determine a diagnosis that guides future patient/client management.

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

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

Management of Care Delivery
• 7D28. Manage the delivery of the plan of care that is consistent with professional obligations, interprofessional collaborations, and administrative policies and procedures of the practice environment.
• 7D29. Delineate, communicate and supervise those areas of the plan of care that will be directed to the PTA.
• 7D30. Monitor and adjust the plan of care in response to patient/client status.
• 7D31. Assess patient outcomes, including the use of appropriate standardized tests and measures that address impairments, functional status and participation.
• 7D32. Complete accurate documentation related to 7D15 - 7D30 that follows guidelines and specific documentation formats required by state practice acts, the practice setting, and other regulatory agencies.
• 7D33. Respond effectively to patient/client and environmental emergencies in one’s practice setting.
• 7D34. Provide physical therapy services that address primary, secondary and tertiary prevention, health promotion, and wellness to individuals, groups, and communities.
• 7D35. Provide care through direct access.
• 7D36. Participate in the case management process.

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

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

Department of Physician Assistant Practice
Campbell University
College of Pharmacy & Health Sciences
Leon Levine Hall of Medical Sciences
4350 U.S. 421 South
Lillington, NC 27546

Mailing Address
P.O. Box 1090
Buies Creek, NC 27506
Phone: (800) 760-9734, ext. 1210

Academic Program
The Physician Assistant Program at Campbell University focuses on an evidence-based, patient-centered, clinically practical curriculum which will prepare students for the opportunity to enter one of the fastest growing health care professions. Students who complete the program will earn a Master of Physician Assistant Practice (MPAP) degree.

Mission Statement
Campbell University’s Physician Assistant (PA) program provides graduate clinical education in a Christian environment in the tradition of faith, learning, and service. Principles of medical science and professional ethical standards inform the education of our students. The program endeavors to meet the future needs of the PA profession and its role in the health care delivery system throughout the continuum of care. The program promotes patient-centered, evidence-based medicine preparing students to be competent health care providers.

Goals
The Campbell Physician Assistant Program strives to:
1. Provide a structured curriculum that prepares students for evidence-based clinical practice.
2. Provide an educational environment that is conducive to learning.
3. Provide students with the medical knowledge and clinical skills to practice with diverse patient populations within variety of practice settings and clinical disciplines.
4. Promote a patient-centered approach to health and disease by emphasizing primary care.
5. Prepare students to become members of an interprofessional healthcare team.

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

Admission Policies
Campbell PA program applicants must use the Central Application Service for Physician Assistants (CASPA) online at www.caspaonline.org. The Campbell PA program CASPA code is 0406.

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

All application material must be received by November 1. Once a complete application has been submitted it will be reviewed by the Admissions Committee. Interview and acceptance is conducted on a rolling basis. The earlier an applicant applies, the better the chances are for acceptance. A criminal background check and a substance of abuse screening test are required for students who are accepted into the program. Students will also be required to submit a non-refundable $1,500 deposit. Tuition payment will be due the first week of classes.

Admissions Requirements
• Bachelor’s degree from a regionally accredited institution in the U.S.
• Recommended overall GPA > 3.2
• Recommended prerequisites GPA > 3.2
• Recommended GRE score of 1,100 (> 300 revised GRE format) within the past 5 years
• Required 1,000 hours of health care experience (HCE) completed at the time of application
• Recommended shadowing of a clinically practicing PA for a minimum of 20 hours
• Three letters of recommendation. Preference is given to applicants with two out of three letters from physicians, PAs, clinical supervisors, and others familiar with your clinical experience. Personal recommendations are discouraged.

Admissions Process
• All submitted material must be received by November 1.
• Complete online application available at www.caspaonline.org.
• Submit all official college transcripts to CASPA.
• Submit three letters of recommendation to CASPA.
• Submit GRE scores to CASPA.
• Submit supplemental application with required fee of $50 and a passport size photo to CPHS.

Prerequisites
• Bachelor’s degree completed by the end of the spring semester prior to matriculation
• All prerequisites must be completed no later than December 31 of the year prior to matriculation
• All pre-professional academic work must be done at a regionally accredited college or university in the United States
• There is no advanced standing
• The Program does not accept transfer credit
• All grades must be “C” or better
• No time limit on completed course Courses:

Examples of Qualifying Health Care Experience
• Athletic Trainer
• Emergency Room/Medical Technician
• Laboratory Technologist
• Medical Assistant
• Military Medic
• Nurse
• Nursing Assistant
• Occupational Therapist
• Pharmacy Technician
• Phlebotomist
• Physical Therapist
• Physical Therapy Assistant
• Radiological Technologist
• Respiratory Therapist
• Surgical Technician

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

campbell.edu/cphs | 87
Financial Information

Tuition and Fees
Tuition and fees are determined annually and are available at www.campbell.edu/paprogram. Tuition and fees are estimated and are subject to change. New tuition and fee schedules will become effective at the beginning of each academic year. Graduating students are responsible for the purchase of their cap and gown. Optional fees include a yearly parking permit and student illness insurance.

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

Financial Aid
For specific financial aid information, please contact the student financial planning office at (910) 893-1310.

Policies and Procedures

Advanced Standing and Transfer of Credit
The PA Program does not offer advanced standing or accept transfer of credit for the Master of Physician Assistant Practice degree. All relevant coursework required for graduation must be completed in the Campbell PA Program.

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

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

Technical Standards for Admission
The Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) requires all Physician Assistant (PA) programs to publish technical standards for admission. “Technical Standards” as defined in Section 504 of the Act, “refers to all nonacademic admissions criteria that are essential to participate in the program in question.”

All PA students must possess the intellectual, ethical, physical, and emotional capabilities required to undertake the full curriculum and to achieve the levels of competence required by the faculty. Because these standards describe essential functions that students must demonstrate to meet the requirements of PA education, they are prerequisites for entrance, continuation, promotion, and graduation from the PA program. The use of an intermediary, a person trained to perform essential skills on behalf of the student, is not permitted. The following technical standards are adapted from the AAMC guidelines.

Candidates for admission to and graduation from the Campbell PA Program should possess the following abilities:

Observation
The candidate must be able to observe required demonstrations and experiments in the basic sciences, including but not limited to anatomic dissection, microscopic studies, and patient demonstrations. A candidate must be able to observe a patient accurately at a distance and close at hand. Observation necessitates the functional use of the sense of vision, hearing, and somatic sensation.

Communication
A candidate must be able to speak, to hear, and to observe patients in order to elicit information, describe changes in mood, activity, and posture, and perceive non-verbal communication. A candidate must be able to communicate effectively and sensitively with patients. Communication includes not only speech, but also reading and writing in English. The candidate must be able to communicate effectively and efficiently in oral and written form with all members of the health care team.

Motor Abilities
A candidate must have sufficient motor function to carry out the basic laboratory techniques and to elicit information from patients by palpation, auscultation, percussion, and other diagnostic maneuvers, perform dissection of a human cadaver, and have sufficient motor ability to use a microscope. A candidate should be able to perform a complete physical examination (including pelvic and rectal examination); diagnostic procedures (e.g., venipuncture and basic laboratory tests such as urinalysis).

A candidate must be able to execute motor movements reasonably required to provide general care and emergency treatment to patients. Examples of treatment reasonably required of physician assistants are cardiopulmonary resuscitation, the administration of intravenous medication, the application of pressure to stop bleeding, the suturing of simple wounds, assisting in surgical operations, and the performance of simple, general obstetrical and gynecological procedures. Such actions require coordination of both gross and fine muscular movements, equilibrium and functional use of the senses of touch, vision, and hearing.

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

Behavioral and Social Attributes
A candidate must possess the emotional health required for full utilization of his or her intellectual abilities, the exercise of good judgment, the prompt completion of all responsibilities attendant to the diagnosis and care of patients, and the development of mature, sensitive and effective relationships with patients and their family members, staff, and colleagues. Each candidate must be able to work effectively as a member of a health care team.

Candidates must be able to tolerate physically taxing workloads and to function effectively under stress. They must be able to adapt to changing environments, to display flexibility and to learn to function in the face of uncertainties inherent in the clinical problems of many patients. Compassion, integrity, concern for others, interpersonal skills, collegiality, interest, and motivation are all personal qualities that are assessed during the admission and education processes.

Disclaimer: Accepted students with a disability who believe they may require special accommodations should contact the Coordinator for Academic Support Services immediately upon accepting the offer of admissions and before matriculation. Before matriculation, accepted students must attest in writing that they have read and are able to meet the program’s technical standards.
Academic Standards

PA Academic Performance and Standards Committee
The Academic Performance and Standard Committee (APSC) of the Campbell University Physician Assistant program consist of the principal faculty: the program director (chair), medical director, academic coordinators, clinical coordinator, and general faculty members. The committee meets prior to the end of each semester to review the academic standing of each student. Prior to the end of the didactic year the APSC convenes to recommend students for advancement to the clinical year; it convenes again prior to the end of the clinical phase to recommend students for graduation. The committee will also be convened at any point in the program at the recommendation of a faculty member to discuss a student whose performance is at risk for not meeting standards.

Retention and Promotion Criteria
Students enrolled in the Physician Assistant program are expected to make satisfactory academic progress toward completion of degree requirements. Satisfactory academic progress is defined as successful completion of all required courses and completion of all deficiencies and/or required remedial programs in the time and manner prescribed by the Physician Assistant program faculty. Students who fail to maintain satisfactory academic progress will be placed on academic probation. Students on academic probation will be required to participate in academic counseling and/or in a remedial program of study.

Didactic Remediation
Students having academic difficulty can request tutoring by contacting the Coordinator for Academic Support Services at no cost. For an appointment call 910-814-5693. Advisors may refer students for tutoring as part of a remediation plan.

1. Didactic Exam Remediation
It is required that each student has a satisfactory understanding of all course material presented during the program in order to be a competent clinician. A student who fails an exam with a grade of less than 70% will meet with his/her faculty advisor or course coordinator, as directed by the academic coordinator. The meeting should include a review of the student’s study habits. The student must complete a written or practical remedial exam within two weeks, to ensure content competency. The completed remedial exercise will be placed in the student’s file. The exam grade will not be changed.

2. Unit Remediation
Clinical Medicine I, II, and III courses are composed of several units. In each unit there will be one or more exams. If a student receives a failing unit grade he or she must meet with his or her advisor. The student must successfully pass a remedial written or practical exam within two weeks of unit failure. If the student successfully remediates the unit, the grade will remain unchanged; however, the student will not be placed on academic probation. If the student fails to successfully remediate the material in the prescribed time he/she will be placed on academic probation.

3. Course Grades
Students must successfully complete all required courses of the Physician Assistant program with a minimum grade of 70%. A student who fails any one course will be placed on academic probation. The student will be given one opportunity to remediate the course. The student must successfully pass a remedial written or practical exam within two weeks in order to continue in the program. After successful remediation the course grade will be advanced to 70%. Failure to successfully remediate the course in the prescribed manner and time will result in dismissal from the program. Failure of any second course during the didactic year is not remediable and will result in dismissal from the program.

Remediation Records
A record of all student remediation exercises will be kept in the student’s file. A record of remediation for each semester is kept in a flow sheet in the program files.

Academic Probation
Academic probation is the initial action for a student failing to make satisfactory academic progress. A student will be placed on academic probation for:

1. Failure to successfully remediate a unit in which he or she received a grade of less than 70%, or
2. Failure of one didactic course with a grade of less than 70%, but which was successfully remediated.

A student placed on academic probation will be on probation for the rest of the didactic year. A didactic year student on probation will be required to meet with his/her advisor to develop a remedial study plan. The advisor may recommend referral to student services for tutoring, restricting participation in non-academic clubs, and committees or a combination of interventions. A student on academic probation who fails to successfully remediate a second unit failure will be dismissed from the program.

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

1. Failure to successfully remediate an initial course failure, in which the student received a grade of less than 70%,
2. Failure of a second course, or
3. Failing to successfully remediate a second unit failure.

Students who are dismissed from the program have three (3) business days to appeal the decision to the associate dean for academic affairs. The associate dean will review the case within seven (7) business days and deliver a decision. The decision of the associate dean for academic affairs is final.

Students who are dismissed must return the program provided laptop, iPad mini, identification card, name tags, and the Campbell logo patch.

Administrative Probation
Regardless of academic standing, a didactic phase or clinical phase student may be placed on administrative probation at any time for unprofessional behavior or activity. Students on administrative probation will be required to engage in counseling as determined by the APSC and sign a probation contract. Counseling must be satisfactorily completed, as determined by the APSC, in order for the student to be removed from administrative probation.

A didactic phase or clinical phase student will be placed on administrative probation for:

1. Failure to demonstrate appropriate professional attitudes and behaviors, or
2. Documented behaviors that would preclude professional licensure.

Administrative Dismissal
A student on administrative probation who fails to complete and/or respond to required counseling in the required time will be dismissed from the program.

A student on administrative probation who fails to comply with the terms of the probation, or who repeatedly demonstrates unprofessional behavior will, upon recommendation of the APSC, be presented to the Campbell University Behavioral Intervention Team (CUBIT). After discussion of
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 clinical coordinator’s evaluation, as outlined in the course syllabus. Failure of any EOR exam must be successfully remediated with a written exam and assignment. The grade earned on the initial exam will be the grade used to calculate the final course grade. If a student does not successfully remediate a failed EOR exam, they will be placed on academic probation. Failure to successfully remediate a second EOR exam failure will result in dismissal from the program.

Students may remediate up to two failed EOR exams, without being placed on academic probation. Failure of a third EOR exam will result in academic probation. Failure of a fourth EOR exam will result in the student going before the PA Academic Performance & Standards Committee. The committee will review each student’s overall academic performance on an individual basis to determine whether, and under what stipulations, the student may continue in the Program.

Preceptor Evaluation
Clinical preceptor grades are an integral part of assessment of clinical year students. Clinical year students who receive a failing grade from a preceptor on any rotation may be placed on probation, after review of the situation by the Academic Performance and Standards Committee (APSC). Students who receive a failing grade from a second preceptor evaluation will be brought before the APSC. The APSC will evaluate the specific circumstances of each preceptor evaluation. If the APSC decides that the evaluations are evidence that the student is unprepared for the rigors of clinical practice, the student will be dismissed from the program.

Course Remediation: Failure of a clinical rotation with a grade of less than 70% requires repeating the rotation and the student will be put on academic probation. Mandatory repeating of the clinical rotation will result in delay of graduation from the program. The student will incur additional tuition costs for the repeat rotation. Failure of a second clinical rotation is evidence that the student is unprepared for the rigors of clinical practice and will result in dismissal of the student from the program.

Clinical Year Probation
Clinical year students on probation will be required to meet with their advisor to develop a comprehensive written remedial study plan to assure comprehension of the core material.

Students will be placed on academic probation for:
1. Failing to successfully remediate an end-of-rotation exam failure, or
2. Failing a clinical rotation with a grade of less than 70%, but was successfully remediated, or
3. Failing a preceptor evaluation for any rotation, upon recommendation of the APSC.

Clinical Year Dismissal
Clinical students will be dismissed from the Physician Assistant program for the following:
1. Being placed on clinical year probation twice during the clinical phase of the program,
2. Failure of a second clinical rotation,
3. Failure of two preceptor evaluations, following review by, and on recommendation of the APSC.
4. Failure to complete and/or respond to required counseling as a result of administrative probation.

Academic Status Appeals
Any student in the Physician Assistant program has the opportunity to appeal any decision made by the APSC. Students desiring to appeal a decision rendered by the APSC must submit a written petition to the College of Pharmacy & Health Sciences’ associate dean for academic affairs within seven days of the student’s receipt of notification of the APSC decision. The decision of the associate dean is final.

Grade Appeals
Students who feel that they have a just reason for appealing a grade in a Department of Physician Assistant Practice course must first appeal to the course coordinator. If no resolution is achieved at the level of the course coordinator a student may appeal to the program director within seven days of notification of the grade. If the student feels the program director’s resolution is not just, the student must submit a written petition to the College of Pharmacy & Health Sciences’ associate dean for academic affairs within seven days of the student’s receipt of notification of the program director’s decision. The petition must contain the specific variance requested and a description of any extenuating circumstances intended to justify granting the variance. The decision of the associate dean is final.

Test Question Appeal
Students who contest the answer to a test question may appeal to the course coordinator, within three days of the exam grade being posted. The appeal must be accompanied by at least two peer-reviewed references. The decision of the course coordinator is final.

Service Hours
Service to the program, college, university, community, and profession is an integral part of the Campbell mission of faith, learning, and service. Physician Assistant students are required to earn 25 service-learning hours, during the first year of study, as part of the didactic curriculum. Service hours can be earned by participating in college health fairs, the Buies Creek Elementary school health fair, PA day activities, the annual Charity Golf Tournament, adopt-a-highway program, and serving as hosts during open houses or Marshalls at graduation, among other activities. Students may also submit verified hours from service to their local churches or community groups. In addition to all other components required for successful completion of the didactic year, completion of the 25 mandatory service hours must be accomplished by the end of the Clinical Year.
Orientation week each year in order to advance to the clinical year and begin rotations. Failure to complete the hours as required may delay graduation.

**Advancement to the Clinical Year**

Advancement to the clinical year requires faculty approval and attainment of the following requirements:
1. Successful completion of all courses,
2. Maintenance of a 70% or greater overall grade average,
3. Successful completion of the didactic year summative evaluations, and
4. Completion of 25 hours of required service learning.

**Graduation Requirements**

Recommendation for graduation requires faculty approval and attainment of the following requirements:
1. Successful completion of all courses, requirements, and remediation,
2. Successful completion of the Campbell PA program PANCE board review seminar, and
3. Successful completion of all summative clinical year evaluations.

**Graduation after Deceleration**

PA Students who decelerate due to probation, repeating a clinical rotation, or approved medical leave, and are in good academic standing, may walk at the graduation ceremony with their original cohort if they lack no more than five hours of credit (one clinical rotation). The outstanding credit must be completed no later than March 15 of the year immediately following the original graduation date. Students who lack more than five hours of credit, or miss the deadline for completion, will be able to walk at the next graduation ceremony after completion of their outstanding requirements.

Students who decelerate will receive their degree at the next University awarding period; either the May, August, or December graduation dates. Students may sit for their NCCPA boards and apply for North Carolina licensure once all program requirements have been met, and the program director releases their names to the appropriate boards.

All academic, clinical, and remedial work must be completed within three years of matriculating in the PA program. Students who have outstanding work after three years may reapply for admission, as described under the academic dismissal policy.

**Employment while in the Program**

1. Outside employment during the didactic or clinical phases of the PA program is strongly discouraged.
2. Required program activities cannot be altered by outside activities. Outside obligations cannot interfere or impede class attendance or completion of assignments of program requirements.
3. Students are not permitted to perform any clerical, administrative, or physical work for the PA program or be employed as a graduate assistant.
4. Students must not substitute for faculty or staff by performing any administrative, clerical, or clinical duties while on supervised clinical educational rotations.

**Assignment Completion**

All course assignments must be turned in by the date and time posted by the instructor. A late penalty of 5-points per day will deducted from the assignment grade. Unless specific reasons for late submissions are approved in advance by the instructor, an assignment that is more than 6 days late will not be accepted and the student will receive a zero for the assignment.

**Exam Protocol – Late for an Exam**

It is unacceptable to be late for an exam as it is disruptive for the rest of the class. Students must be in their seats and have their computers set up before the posted exam time (usually on the hour). Students who are late for an exam must not enter the exam room; those students must report to the PA office suite. They will be set up in a location provided by faculty, or other proctors, who may be available. For a first offense the earned grade will be awarded. For any subsequent exam tardiness, students up to 15 minutes late will receive a 10% reduction in grade for the exam. Students more than 15 minutes late (usually 15 minutes after the hour) will not be allowed to take the exam and will receive a zero for the exam. For extenuating circumstances – car problems, road conditions, acute illness, or other instances beyond the student’s control – the student must notify their advisor or the course coordinator by email, text, or phone as soon as possible. Program faculty will decide whether a make-up exam will be permissible.

**Attendance**

Attendance is required at all classes and examinations. Attendance is a part of class participation. Students who have an unexcused absence will receive a two-point deduction from the professionalism grade for the course. Students who show a consistent pattern of tardiness for class will receive a warning. After the warning, students will receive a one-point deduction from the professionalism grade for each subsequent infraction. Refer to the Clinical Year Manual for detailed information on clinical year absences.

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

**Medical Leave-of-Absence**

Students who require a medical leave-of-absence must request a meeting with the program director. The circumstances of the leave will be reviewed with the Academic Performance and Standards Committee. Each case will be considered on an individual basis. A plan for deceleration, remediation, or withdrawal will be developed in discussion with the associate dean for Admissions and Student Services. Student withdrawal will follow the “Withdrawal” protocol in the general section of this bulletin.

**Honor Code**

Refer to the General Information section of this Academic Bulletin for the Honor Code. PA students are required to read and sign the Honor Code, attesting they understand the code, they have read and understand the bulletin, and will adhere to the policies. A signed copy of the code will be kept in the student’s file.
Curriculum

Class of 2017
Beginning in July 2015, the Campbell PA program is transitioning to a 24-month program. The graduate degree program consists of 12 months of didactic education and 12 months of supervised clinical experiential education. Graduates will receive the Master of Physician Assistant Practice (MPAP) degree upon successful completion of the program. The program starts in July, with graduation after six semesters of training, also in July. All didactic courses are held on the health sciences campus in Lillington, NC.

Class of 2015 and 2016
The students in these two classes will continue with the 28 month graduate degree program with 13 months of didactic education and 15 months of supervised clinical experience. Graduates will receive the Master of Physician Assistant Practice (MPAP) degree upon successful completion. Graduation is in December, after seven semesters of study and training.

The PA program curriculum is a competency-based graduate medical education curriculum. The sequence of courses is designed to start with foundation courses in the basic sciences as well as clinical skills. Following the initial foundational coursework, subsequent courses teach clinical medical, surgical and pharmacotherapeutical concepts. Curriculum content is vertically integrated such that the study of topics in a specific clinical discipline, such as cardiology, includes cardiac history and physical exam, cardiology in clinical medicine, cardiology diagnostics such as EKG and appropriate laboratories, and cardiology pharmacotherapeutics. The Clinical Skills Courses will compliment this integrated curriculum through regular exercises in critical thinking such as clinical case studies, simulation activities and objective structured clinical examinations (OSCEs). Early clinical experience opportunities are also interspersed throughout the didactic year. Assessment of students in the first year is by written examinations, performance on laboratory practical examinations, and participation in small group activities as well as final summative exams.

All students complete all didactic elements in the program at the same time. All students must complete all required clinical experiences. The only elective study available in this curriculum is in the second year when students may undertake supervised clinical experiences in two four-week rotations of their choosing.

Curriculum design and operationalization is guided by the standards of accreditation for physician assistant education, as published by the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA). The ARC-PA accreditation standards describe the required curricular components and required supervised clinical experiences for a program to receive accreditation. The curriculum described was designed to meet these accreditation requirements.

Clinical Education
For the Class of 2017, clinical rotations in the second year consist of four-week supervised clerkship experiences in the major disciplines, a seminar in evidence-based medicine and two clinical electives. Evaluation of clinical-year students includes a preceptor assessment of performance, and student performance on written examinations or presentations given at the end of each required clinical rotation. There are final summative exams at the conclusion of the clinical year which are prerequisites for graduation.

The classes of 2015 and 2016 will continue with five-week clinical rotations until graduation.

Didactic Courses

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<tr>
<th>Block 1</th>
<th>Courses</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>MPAP 501 - Anatomy</td>
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<tr>
<td>MPAP 502 - Physiology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MPAP 511 - Genetics</td>
<td>1</td>
<td></td>
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<tr>
<td>MPAP 512 - History &amp; Physical</td>
<td>3</td>
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<tr>
<td>MPAP 519 - Health Policy</td>
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<tr>
<td>MPAP 504 - Clinical Medicine I</td>
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<tr>
<td>• Prevention &amp; Nutrition</td>
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<td></td>
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<tr>
<td>• Infectious Disease</td>
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<tr>
<td>• ENT</td>
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<tr>
<td>• Pulmonology</td>
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<td>MPAP 522 - Clinical Skills I</td>
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<td>MPAP 514 - Orthopaedics</td>
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<td>MPAP 503 - Behavioral Medicine</td>
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<td>• Cardiology</td>
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<td>• Hematology/Oncology</td>
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<td>• Endocrinology</td>
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<td>MPAP 509 - Evidence-Based Medicine</td>
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<td>MPAP 516 - Pharmacology II</td>
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<td>MPAP 521 - Surgery</td>
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<td>MPAP 509 - Evidence-Based Medicine</td>
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<td>• Gastroenterology</td>
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<td>• Women’s Health</td>
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Clinical Rotations

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<td>MPAP 603 - Internal Medicine</td>
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<td>MPAP 604 - Surgery</td>
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<td>MPAP 607 - OB/GYN</td>
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<td>MPAP 608 - Primary Care</td>
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<td>MPAP 609 - Evidence-Based Med. II</td>
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<td>MPAP 610 - Orthopaedics</td>
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<td>MPAP 612 - Elective 2</td>
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*Note: Orthopedics has been removed as a required rotation, effective for the class of 2017. Orthopedics is not required by the ARC-PA.*
Clinical Affiliation
There are numerous clinical affiliations for PA students to complete their supervised clinical training. Students will be notified of their clinical training sites during the spring/summer semester of the didactic year. Those sites are located in Harnett and surrounding counties in North Carolina.

Clinical Rotations at Distant Sites
While many clinical educational rotations are in Harnett and surrounding counties, it may be necessary for the program to arrange some rotations at distant sites. Every effort will be made to arrange clinical rotations that are within 90 minutes’ drive time from campus, or from a student’s home, for those who are North Carolina residents. Travel expenses are the student’s responsibility. Nevertheless, there are times when it may be necessary for the program to send some students to sites that are not within convenient driving distance. In those few instances the program will arrange for suitable housing; however, students will be responsible for travel and housing costs. Students may qualify for discounted housing rates that the program may arrange if available through North Carolina AHEC. Distant rotations will account for no more than three of any student’s total rotations.

Course Descriptions

Didactic Courses
MPAP 501 – Human Anatomy
Credit: 4 hours
Human Anatomy prepares the student for clinical practice with an understanding of functional human anatomy. The course consists of lecture and cadaver lab. The lecture and lab sections are organized in an organ system approach, correlating with the physical diagnosis unit that runs concurrently. Lecture and lab are taught by experienced clinicians.

MPAP 502 – Physiology
Credit: 3 hours
Physiology provides the student with an understanding of pathophysiological processes that inform clinical medicine. The course is structured in an organ system approach, correlating the basic sciences with clinical applications. It is delivered in the first semester as a foundation for the clinical medicine courses. It is structured to coincide with the anatomy course and the physical diagnosis course to emphasize clinical applications.

MPAP 503 – Behavioral Medicine
Credit: 3 hours
This course is an introduction to psychiatric and psychosocial disorders and behaviors. Presented in lecture and seminar format the major psychiatric disorders are studied. Led by experienced clinicians, clinical reasoning exercises include small-group clinical case study discussions which are utilized to develop problem-solving skills. Standardized patients and/or objective structured clinical examinations prepare the student for clinical patient interactions.

MPAP 504 – Clinical Medicine I
Credit: 4 hours
This is the first of four didactic clinical medicine courses presented in the first year. The course concentrates on the etiology, pathophysiology, clinical presentation, diagnosis, treatment, and prevention of disease; organized into an organ system approach. This first course will cover preventive medicine, infectious diseases, pulmonology, and diseases of the head, eyes, ears, nose and throat. The course is presented in lecture format taught by physicians and physician assistants. Clinical reasoning exercises include small-group clinical case study discussions, led by experienced clinicians, which are utilized to develop problem solving skills. Standardized patients and/or objective structured clinical examinations prepare the student for clinical patient interactions.

MPAP 505 – Clinical Medicine II
Credit: 4 hours
This is the second of four didactic clinical medicine courses presented in the first year. The course will concentrate on the etiology, pathophysiology, clinical presentation, diagnosis, treatment, and prevention of disease; organized into an organ system approach, this second course will cover cardiology, hematology & oncology, and endocrinology. The course is presented in lecture format taught by affiliated physicians and physician assistants. Clinical reasoning exercises include small-group clinical case study discussions, led by experienced clinicians, which are utilized to develop problem solving skills. Standardized Patients and/or Objective Structured Clinical Examinations prepare the student for clinical patient interactions.

MPAP 506 – Clinical Medicine III
Credit: 4 hours
This is the third didactic clinical medicine course presented in the first year. The course will concentrate on the etiology, pathophysiology, clinical presentation, diagnosis, treatment, and prevention of disease; organized in a life-cycle approach, covering gastroenterology, women’s health, and nephrology/urology. The course is presented in lecture format taught by affiliated physicians and physician assistants. Clinical reasoning exercises include small-group clinical case study discussions, led by experienced clinicians, which are utilized to develop problem solving skills. Standardized patients and/or objective structured clinical examinations prepare the student for clinical patient interactions.

MPAP 507 – Clinical Medicine IV
Credit: 4 hours
This is the fourth didactic clinical medicine course presented in the first year. The course will concentrate on the etiology, pathophysiology, clinical presentation, diagnosis, treatment, and prevention of disease; covering dermatology, pediatrics, neurology, and geriatric medicine. The course is presented in lecture format taught by affiliated physicians and physician assistants. Clinical reasoning exercises include small-group clinical case study discussions, led by experienced clinicians, which are utilized to develop problem solving skills. Standardized patients and/or objective structured clinical examinations prepare the student for clinical patient interactions.

MPAP 508 – Evidence-Based Medicine
Credit: 3 hours
This one semester course is an introduction to the principles and practice of Evidence-Based Medicine (EBM). Evidence based-medicine provides tools to assist clinicians to make accurate diagnoses and select optimal treatment for their patients. This course will review statistical concepts, the epidemiologic basis for clinical research, and research ethics, and will teach students to formulate clinical questions, search and critically appraise the medical literature, and incorporate best evidence into their practice. The course content is presented in lecture format with small group discussions.

MPAP 510 – Emergency Medicine
Credit: 2 hours
This course will focus on the management of patients with emergency medical and surgical conditions requiring evaluation and treatment. Presented in lecture format, with small group case discussion sessions, the student will learn to recognize those patients with life-threatening disorders. Triage, stabilization, diagnostic and therapeutic procedures, and specialty consultation will be covered. As adjunctive material and in preparation for
clinical year studies students will take the BLS and ACLS certification courses prior to starting the clinical year rotations. Clinical simulation in the simulation lab prepares students for emergent patient care.

MPAP 511 – Genetics
Credit: 1 hour
This one semester course is an introduction to medical genetics and genomics. Presented in lecture format and group and case discussions, this course explores the genetic basis of disease as well as principles of genomics, current research, ethical dilemmas, and cancer genetics. Students will also study medical genomics, the application of which can be used to develop genotypic specific diagnoses, prevention, and therapy.

MPAP 512 – History & Physical Examination
Credit: 3 hours
History and Physical Examination introduces the student to the art of acquiring a patient history and performing the physical examination using lecture and laboratory, and small group formats. The small group labs will allow the student to learn history and physical skill, after they are demonstrated by the faculty. Simulated patient encounters will provide the student with the opportunity to practice their clinical skills. At the conclusion of each lab students will perform a case-based clinical scenario exercise with their lab partner and receive feedback on their performance. A summative physical exam will be performed and graded.

MPAP 514 – Orthopaedics
Credit: 2 hours
This course presents the student with an overview of the discipline of orthopedics. Presented in lecture and laboratory format, this course covers the basics of musculoskeletal medicine. Several procedural seminars dedicated to musculoskeletal physical examination skills, casting and splinting, and interpretation of skeletal radiographs are included. The course will cover musculoskeletal disorders of all age groups. Special emphasis will be directed to office and emergency orthopedics as seen in primary care.

MPAP 515 – Pharmacotherapeutics I
Credit: 2 hours
This course is the introductory section of a four course pharmacotherapeutics curriculum. This first section will introduce the student to the basic principles of pharmacodynamics, pharmacokinetics, drug metabolism, drug interactions, and adverse reactions. The student will also be introduced to the drug reference resources. Drugs will be introduced in conjunction with the clinical medicine units that are taught this semester. Presented in lecture format with interactive sessions, this unit will provide the student with the pharmacotherapeutic principles needed for clinical practice. The course is taught by experienced faculty from the Department of Pharmacy Practice.

MPAP 516 – Pharmacotherapeutics II
Credit: 2 hours
This is the second of four pharmacotherapeutics courses. The course will concentrate on therapeutic applications of drugs for various organ systems integrated with the clinical medicine units being taught during this semester. Presented in lecture format augmented by clinical case presentations discussed in small group sessions. The course is taught by experienced faculty from the Department of Pharmacy Practice.

MPAP 517 – Pharmacotherapeutics III
Credit: 2 hours
This is the third Pharmacotherapeutics course. The course will concentrate on therapeutic applications of drugs for various organ systems integrated with the clinical medicine units being taught during this semester. Presented in lecture format augmented by clinical case presentations discussed in small group sessions. The course is taught by experienced faculty from the Department of Pharmacy Practice.

MPAP 518 – Pharmacotherapeutics IV
Credit: 2 hours
This is the fourth pharmacotherapeutics course. The course will concentrate on therapeutic applications of drugs for various organ systems integrated with the clinical medicine units being taught during this semester. Presented in lecture format augmented by clinical case presentations discussed in small group sessions. The course is taught by experienced faculty from the Department of Pharmacy Practice.

MPAP 519 – Health Policy & Professional Practice I
Credit: 1 hour
This one semester course introduces the student to the issues of physician assistant professional practice including PA history, state laws and rules, certification, licensure, DEA regulation, and malpractice insurance. The course also presents topics in healthcare delivery systems, quality improvement, health policy, medical ethics, patient safety, healthcare reform, the patient-centered medical home, population health, public health, cultural competence, and healthcare disparities. The course will explore coding and reimbursement. The student will also have the opportunity to be exposed to the other members of the healthcare team in an interprofessional seminar.

MPAP 521 – Surgery
Credit: 4 hours
This course, presented in lecture format with weekly lab sessions, is designed to introduce the student to the fundamentals of surgical practice. Lectures will cover surgical principles and common surgical conditions. The student will learn basic clinical procedures including sterile procedure, anesthesia, suturing, and common office procedures. Pre-operative and post-operative patient care is presented.

MPAP 522 – Clinical Skills I
Credit: 2 hours
This course is the first in a sequence of four courses presented in the first year. The course is designed to develop the clinical skills necessary for practice as a physician assistant in primary care. This course will enhance the knowledge and skills relevant to obtaining a medical history, conducting a physical examination, formulating a differential diagnosis and initial management plan, and presenting a case in a professional setting. The focus of this course is to introduce critical thinking skills as well as procedural skills required in physician assistant practice. Topics included in this course are closely aligned with the block’s clinical medicine unit. Each topic is presented in a variety of formats including small-group clinical case studies, Standardized Patients (SPs) and/or Objective Structured Clinical Examinations (OSCEs) and clinical simulations. Systems-based diagnostic imaging and laboratory medicine concepts are included in lecture and lab format. In addition, practice in selection and interpretation of routine diagnostics is incorporated throughout this course. Students will complete field assignments assessing patients and submitting the appropriate written documentation.

MPAP 523 – Clinical Skills II
Credit: 2 hours
This course is the second in a sequence of four courses presented in the first year. The course is designed to develop the clinical skills necessary for practice as a physician assistant in primary care. This course will enhance the knowledge and skills relevant to obtaining a medical history, conducting a physical examination, formulating a differential diagnosis and initial management plan, and presenting a case in a professional setting.
The focus of this course is to introduce critical thinking skills as well as procedural skills required in physician assistant practice. Topics included in this course are closely aligned with the block’s clinical medicine unit. Each topic is presented in a variety of formats including small-group clinical case studies, Standardized Patients (SPs) and/or Objective Structured Clinical Examinations (OSCEs) and clinical simulations. Systems-based diagnostic imaging and laboratory medicine concepts are included in lecture and lab format. In addition, practice in selection and interpretation of routine diagnostics is incorporated throughout this course. Students will complete field assignments assessing patients and submitting the appropriate written documentation.

MPAP 524 – Clinical Skills III
Credit: 2 hours
This course is the third in a sequence of four courses presented in the first year. The course is designed to develop the clinical skills necessary for practice as a physician assistant in primary care. This course will enhance the knowledge and skills relevant to obtaining a medical history, conducting a physical examination, formulating a differential diagnosis and initial management plan, and presenting a case in a professional setting. The focus of this course is to introduce critical thinking skills as well as procedural skills required in physician assistant practice. Topics included in this course are closely aligned with the block’s clinical medicine unit. Each topic is presented in a variety of formats including small-group clinical case studies, Standardized Patients (SPs) and/or Objective Structured Clinical Examinations (OSCEs) and clinical simulations. Systems-based diagnostic imaging and laboratory medicine concepts are included in lecture and lab format. In addition, practice in selection and interpretation of routine diagnostics is incorporated throughout this course. Students will complete field assignments assessing patients and submitting the appropriate written documentation.

MPAP 525 – Clinical Skills IV
Credit: 2 hours
This course is the fourth in a sequence of four courses presented in the first year. The course is designed to develop the clinical skills necessary for practice as a physician assistant in primary care. This course will enhance the knowledge and skills relevant to obtaining a medical history, conducting a physical examination, formulating a differential diagnosis and initial management plan, and presenting a case in a professional setting. The focus of this course is to introduce critical thinking skills as well as procedural skills required in physician assistant practice. Topics included in this course are closely aligned with the block’s clinical medicine unit. Each topic is presented in a variety of formats including small-group clinical case studies, Standardized Patients (SPs) and/or Objective Structured Clinical Examinations (OSCEs) and clinical simulations. Systems-based diagnostic imaging and laboratory medicine concepts are included in lecture and lab format. In addition, practice in selection and interpretation of routine diagnostics is incorporated throughout this course. Students will complete field assignments assessing patients and submitting the appropriate written documentation.

临床课程

MPAP 601 – 急诊医学
学分：5小时

本4周轮转位于我们附属急诊科。学生将参与所有方面紧急医疗服务。学生将进行与会，评估和检查患者，并将患者转至急诊科。学生将掌握所有患者护理，为接收者提供护理。急诊程序和治疗将由临床前教师指导。患者接触必须记录在PA程序。学生将根据教授预后评估和最终检查。

MPAP 602 – 家庭护理
学分：5小时

本4周轮转介绍学生家庭医学的基本知识。学生将参与所有方面的护理患者。学生将进行与会，评估和检查患者，并将患者转至接收者。特别强调是给予患者教育，预防，和健康维持。

MPAP 603 – 内科医学
学分：5小时

本4周轮转为学生提供机会进行医疗干预，提供内科疾病患者在住院和/或门诊。在接收者，预后分析，治疗患者，并由接收者指导。在住院设置，学生将与住院患者团队。在门诊设置，学生可以参与护理患者的护理，或接收者，撰写订单，和请求。他们在护理中获得的荣誉将有助于对患者的护理和家庭护理。

MPAP 604 – 手术
学分：5小时

本4周轮转位于我们附属的患者常规医疗单元。学生将学习预手术，即时，和术后护理。学生将进行与会，即时，和术后护理。学生将在护理中获得的荣誉将有助于对患者的护理，和家庭护理。学生将与 discharge planning。学生将被分配到一个转诊团队，响应紧急情况的ED和OR。

MPAP 605 – 儿科
学分：5小时

本4周轮转将使学生熟悉儿科实践。轮转将要么在附属的患者中心，要么在私人的患者中心。学生将护理婴儿，儿童，和青少年。职责将包括常规医疗维护，物理检查，急性护理，和患者教育。学生将注意到正常发展，并欣赏与心理健康障碍相关的常见异常。

MPAP 606 – 精神病学
学分：5小时

本4周轮转使学生熟悉精神病患者的精神科和心理社会障碍。学生将进行与会，评估和检查患者，并将患者转至接收者。特别强调是给予患者教育，预防，和健康维持。

MPAP 607 – 妇产科
学分：5小时

本4周轮转为学生提供机会进行医疗干预，提供妇产科疾病患者。学生将学习乳房和妇科癌症，正常和异常月经周期，和家庭规划。学生在提供常规产前和产科护理。

MPAP 608 – 基本护理
学分：5小时

本4周轮转介绍学生到基本的患者护理。学生可以参与在ambulatory clinic, internal medicine office, family practice, or urgent care。学生将参与在所有方面护理的患者。
all ages. The student will interview, examine, and treat patients under the direction of the preceptor. Special emphasis is placed upon patient education, prevention, and health maintenance.

MPAP 609 – Evidence-Based Medicine II
Credit: 5 hours
This 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. A case presentation is required at the completion of the elective to be shared with the faculty and fellow students during call back day.

MPAP 612 – Elective II
Credit: 5 hours
The student is given the option of electing 2 rotations of their choice. They may be medical and/or surgical electives. It is proposed to select electives that will fulfill the student’s clinical interests and add to their experience preparing for the job market. A case presentation is required at the completion of the elective to be shared with the faculty and fellow students during call back day.

MPAP 613 – Senior Seminar
Credit: 5 hours
This 5 credit hour seminar concludes professional practice training following completion of supervised clinical practice experiences (SCPEs). The seminar is required in order to successfully complete the SCPE year. Seminar contents include a PANCE preparation course and practice examination; a self-assessment examination; summative clinical practical skills evaluations; a summative written examination, completion of a professionalism module, and lecture and seminar content designed to prepare the graduating physician assistant for professional practice.

Competencies for Graduates
In order to prepare for certification and professional practice as a Physician Assistant, the PA student must graduate from a competency based, entry level, and accredited PA program. The Campbell PA program consists of didactic and clinical education guided by the Standards for Physician Assistant Education, as set forth by the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA). Upon completion of the program the graduate should possess defined basic competencies required to deliver high quality health care in a dynamic clinical environment.

In an effort to define PA competencies the National Commission on Certification of Physician Assistants (NCCPA), the ARC-PA, the American Academy of Physician Assistants (AAPA), and the Physician Assistant Education Association (PAEA) have developed a list of suggested clinical competencies for the PA profession. The competencies are based on the Accreditation Council for Graduate Medical Education (ACGME) model with areas specific to PA practice.

With respect to the guidelines for PA competencies specific knowledge, skills, and attitudes are addressed in PA education. Students graduating from the Campbell PA program must be able to demonstrate competency in the following areas:

Medical Knowledge
Physician Assistants are expected to:
- Demonstrate knowledge of the structure and function of the human body from conception to death
- Demonstrate knowledge of the presentation, etiologies, risk factors, pathophysiology, and epidemiology for medical and surgical conditions, applying this knowledge to patient care
- Demonstrate knowledge of the diagnosis, treatment, and prognosis of diseases encountered in specialized areas of medicine
- Correlate history and physical findings and diagnostic studies to formulate a differential diagnosis
- Identify signs and symptoms of medical conditions encountered in both the inpatient and outpatient settings Select, order, and interpret appropriate diagnostic and laboratory studies
- Differentiate between normal and abnormal anatomic, physiological, and diagnostic test data
- Manage acute and chronic medical and surgical conditions
- Analyze the indications, contraindications, side effects, interactions and adverse reactions of pharmacologic agents
- Identify the appropriate site of care for the patients’ medical condition
- Identify cases requiring emergency treatment and those requiring referral or hospital admission
- Apply appropriate interventions for the prevention of acute and chronic medical conditions

Interpersonal and Communication Skills
Physician Assistants are expected to:
- Create and sustain a therapeutic and ethically sound relationship with patients
- Communicate effectively with patients, families, and the public across a broad range of socioeconomic and cultural backgrounds
- Apply effective listening, nonverbal, explanatory, questioning, and writing skills to elicit and provide information
- Work effectively with physicians and other health care professionals as a member or leader of a health care team or other professional group
- Demonstrate an understanding of the varieties of human behavior in response to illness and death
- Demonstrate caring and respectful behaviors when interacting with patients and their families
- Document information, accurately and adequately, in the medical record regarding the health care process for medical, legal, ethical, and financial purposes

Patient Care
Physician Assistants are expected to:
- Work effectively with physicians and other health care professionals to provide patient-centered care
- Gather essential and accurate information about their patients
- Obtain a complete medical history
- Perform a complete physical examination
- Competently perform medical, surgical, and laboratory procedures (see “technical procedures taught”) including but not limited to:
  - Basic and advanced cardiac life support
  - Wound care
  - Specimen collection
  - Administration of therapeutic agents
  - Application of aseptic technique and universal precaution
  - Surgical assisting
  - Performance of office based procedures and tests
• Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
• Counsel patients and their families in regard to medical and psychosocial issues
• Provide patient education in health promotion and disease prevention to maximize patient autonomy
• Provide health care services aimed at preventing health problems and/or maintaining health
• Provide compassionate healthcare to patients of all age groups, genders, and ethnicities

Professionalism
Physician Assistants are expected to demonstrate:
• Understanding of the legal and regulatory requirements for physician assistant practice
• Understanding of the appropriate role of the physician assistant
• Professional relationships with physician supervisors and other health care providers
• Respect, compassion, and integrity in all clinical and professional situations
• Responsiveness to the needs of patients and society
• Accountability to patients, society, and the profession
• Commitment to excellence and on-going professional development
• Commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
• Sensitivity and responsiveness to patients’ culture, age, gender, and disabilities
• Self-reflection, critical curiosity, and initiative

Practice-Based Learning and Improvement
Physician Assistants are expected to:
• Analyze practice experience and perform practice-based improvement activities in concert with other members of the health care delivery team
• Locate, appraise, and integrate evidence-based scientific studies related to their patients’ health problems
• Apply knowledge of study designs and statistical methods to the appraisal of clinical studies on diagnostic and therapeutic effectiveness
• Apply information technology to manage information, access on-line medical information, maintain electronic medical records, and support continuing medical education

• Recognize that life-long learning is critical to modern medical practice
• Facilitate the learning of students and/or other health care professionals
• Recognize and appropriately address gender, cultural, cognitive, emotional and other biases; gaps in medical knowledge; and physical limitations in themselves and others

Systems-Based Practice
Physician Assistants are expected to:
• Utilize information technology to support patient care decisions and patient education
• Effectively interact with different types of medical practice and delivery systems
• Understand the coding systems necessary for practice reimbursement
• Understand the funding sources and payment systems that provide coverage for patient care
• Practice cost-effective health care and resource allocation without compromising quality of care
• Advocate for quality patient care and assist patients in dealing with system complexities
• Partner with supervising physicians, health care managers and other health care providers to assess, coordinate, and improve the delivery of health care and patient outcomes
• Accept responsibility for promoting a safe environment for patient care and recognizing and correcting systems-based factors that negatively impact patient care
Public Health

Department of Public Health
Campbell University
College of Pharmacy & Health Sciences
PO Box 1090
Buies Creek, NC 27506
910-814-5386
publichealth@campbell.edu

Academic Program
The Department of Public Health offers a master of science degree in public health providing students with a solid foundation in health care research and outcomes evaluation.

Mission Statement
Campbell University’s Master of Science in Public Health (MSPH) prepares students to eliminate health disparities through the transformational integration of practice, policy, and research. With deep commitments to service learning and action research, the faculty, staff, students, and alumni of the MSPH program will engage rural communities as accessible and valuable partners in achieving health equity.

Admission Policies

Admission Requirements
• Bachelor’s degree from an accredited institution
• Minimum cumulative GPA of approximately 3.0
• Acceptable GRE Scores (PCAT, LSAT, MCAT, or MAT scores may be accepted. Please inquire with the program manager prior to applying)

Application Process
1. Complete application with required $50 fee
2. Submit all official college transcripts
3. Submit GRE scores and TOEFL scores (if applicable)
4. Submit three letters of recommendation

Tuition, Fees and Financial Information
Tuition and fees are determined annually and available at www.campbell.edu/publichealth. Graduating students are responsible for the purchase of his or her cap and gown. Optional fees include a yearly parking permit and student illness insurance.

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

Financial Aid
For specific financial aid information, please contact the student financial planning office at (910) 893-1310.

Admission Criteria
The MSPH program operates on a fall enrollment. Admission is granted on a rolling basis therefore, applicants are strongly encouraged to apply early in the admissions cycle. An interview with department faculty and/or staff will be granted to applicants deemed eligible for admission upon faculty review of the completed application.

Late Applicants
Any application received after June 1 of the applying year will be considered late and the applicant may incur a late application fee. Applications for the current cycle will be accepted until August 1. Any application received after August 1 will be held and considered for the following year.

Transfer Credit
Transfer of credit from equivalent course work may be granted. Equivalent coursework must have been completed at or above a Master’s level and at an accredited institution. When requesting a transfer of credit, a student must include the below:
1. Name of previous course
2. Date course was taken
3. Education institution from where the course was completed
4. Syllabus for the course
5. Official transcript with completed course grade

When transferring, the course director will make a recommendation regarding possible exemption directly to the Chair of the Department. The department will make final decisions regarding course exemptions. A maximum of 6 transfer credits will be granted per student.

Prior Degrees
Applicants who hold a professional degree (PhD, JD, DO, MD, MPAP or PharmD) from an accredited institution in the United States are not required to submit a GRE score. The GRE requirement is waived for students enrolled in the doctor of pharmacy, physician assistant, doctor of osteopathic medicine, or juris doctorate programs at Campbell University who are in good standing.

International Applicants
• International applications are not eligible for provisional acceptance as described above, if a US student visa is required.
• International applications must also submit a certified copy of a financial or bank statement that shows sufficient funds to obtain a US student visa.
• International applications must complete their application for admission and all supplemental materials must be received by the April 1 deadline to be considered for admission.
• International applicants are required to provide a World Education Services evaluation of their credentials (at the cost of the applicant.)

Academic Standards

Academic Probation
Academic probation is the initial action for a student failing to make satisfactory academic progress. A student will be subject to being placed on academic probation for any of the following reasons:
1. Failure to maintain a minimum overall 3.0 grade average,
2. Failure of more than one didactic course with a grade of less than a C, or
3. Failure to complete degree requirements within the prescribed time.

Administrative Probation
Regardless of academic standing, a student may be subject to administrative probation at any time for failure to demonstrate appropriate professional attitude and behavior. Students on administrative probation will be required to engage in counseling as determined by the program’s Academic Performance and Standards Committee. Any student placed on administrative probation failing to complete and/or respond to required counseling may be subject to dismissal from the program.

Academic Dismissal
Students who are placed on academic probation will be subject to being dismissed from the Public Health program for any of the following reasons:
1. Failure to successfully remediate an initial course failure in which the student received a grade of less than C, or
2. Failure of a third repeated course, or
Any student dismissed from the program may seek re-entry by applying for readmission. If readmitted, the student will incur full tuition requirements for the program.

Academic Status Appeals
At the end of each academic term, the MSPH Academic Performance and Standards Committee Chair reviews the academic performances of all students enrolled in the College of Pharmacy & Health Sciences. The Chair of the committee notifies each student, the appropriate department chair, and the Associate dean for academic affairs regarding each student who does not meet the academic standards as defined by the Academic Regulations of the department and College of Pharmacy & Health Sciences. The Committee will evaluate each student subject to suspension or dismissal in order to make a recommendation whether to retain the student in the professional program. The student may appear in person before the Committee. Upon approval by the associate dean for academic affairs, the Committee Chair notifies students in writing regarding any decision by the MSPH Academic Performance and Standards Committee to require a modified course of study, to suspend enrollment, or to dismiss the student from the department.

Any student of the College of Pharmacy & Health Sciences has the opportunity to appeal any decision made by the Academic Performance and Standards Committee. Students desiring to appeal a decision rendered by the Committee shall submit a written petition to the associate dean for academic affairs for the College of Pharmacy & Health Sciences within five (5) business days of the student’s receipt of notification of the decision. The petition must contain the specific variance requested, a description 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 academic affairs decision is final.

Grade Appeals
Students who feel that they have a just reason for appealing a grade in any Department of Public Health course must first appeal to the course instructor. If the issue cannot be adequately resolved with the instructor, the student should then submit a written appeal to the Department Chair. The petition must contain the specific variance requested and a description of any extenuating circumstances intended to justify granting the variance.

After efforts within the department, a student may appeal to the College of Pharmacy & Health Sciences Academic Performance and Standards Committee to seek resolution. If the student feels that the resolution is not just, the student must submit a written petition to the associate dean for academic affairs at the College of Pharmacy & Health Sciences within two weeks of the student’s receipt of notification of the committee’s decision. The petition must contain the specific variance requested and a description of any extenuating circumstances intended to justify granting the variance. The associate dean for academic affairs decision is final.

Graduation Requirements
Recommendation for graduation requires faculty approval and attainment of the following requirements:
1. Successful completion of all didactic coursework
2. Successful completion of research capstone project
3. Successful completion of all coursework with a minimum cumulative 3.0 grade average in all MSPH courses

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

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

Honor Code
Please refer to the General Information section of the CPHS Bulletin for the Honor Code. All students are required to read and sign the Honor Code, attesting that they understand the Code, have read and understand the Bulletin, and will abide by each. A signed copy of the Honor Code will be kept in each student’s file.

Curriculum

### First Year

#### Semester 1

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<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 580 - Health Policy &amp; Management</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 502 - Seminar in Public Health</td>
<td>1</td>
</tr>
<tr>
<td>PUBH 699 - Practicum in Public Health</td>
<td>1</td>
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#### Semester 2

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<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 682 - Ethical Issues in Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 502 - Seminar in Public Health</td>
<td>1</td>
</tr>
<tr>
<td>PUBH 699 - Practicum in Public Health</td>
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### Second Year

#### Semester 3

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBH 542 - Community Health Assessment &amp; Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 550 - Environmental 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>
<tr>
<td>Elective</td>
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#### Semester 4

<table>
<thead>
<tr>
<th>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>
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</tbody>
</table>
Course Descriptions

PUBH 101 - Topics in Public Health
Credit: 1
This undergraduate elective course is designed to provide a basic overview of key topics within the field of public health. The course equips students with a broad understanding of public health principles that will allow one to further his/her education with a degree in Public Health and/or career in the field. This one credit course explores: Diseases in National, International, and Global Health; Epidemiology; Emergency Health and Preparedness; Maternal and Children's Health; Local Health Disparities; Health Policies; Health Management; Behavioral and Mental Health; and Environmental Health.

PUBH 102 - Public Health and Film
Credit: 1
This undergraduate elective course examines how public health is presented in films and media. The course pulls the curtain back on Hollywood magic and discusses how public health actually occurs in the real world. The course equips students with a broad understanding of public health principles.

PUBH 502 - Public Health Seminar
Credit: 1
This seminar series is part of four semesters of seminars designed to provide insight into topical areas of public health. The seminar series provides a forum for interaction among students and faculty therefore, opportunities for students to present their research as it progresses.

PUBH 520 - Health Education and Promotion
Credit: 3
This course introduces students to an overview of conceptual theories that are the basis of social and behavioral sciences applied to public health, specifically health education. The course will also provide students with skills needed to understand individual and community behavior and change processes.

PUBH 525 - Overview of Rural Health
Credit: 3
This course introduces students to an overview of the major issues in rural health. This course will also provide an understanding of the demographics, economics, policy and structure of the health care delivery systems in rural America, specifically North Carolina.

PUBH 540 - Statistical Methods
Credit: 3
This course introduces students to an overview of biostatistics and its role in the discipline of public health with an emphasis on statistical reasoning and methods. Prerequisite: College-level Statistics (i.e., Math 160) or the equivalent.

PUBH 542 - Community Health Assessment and Evaluation
Credit: 3
This course integrates the two important community health methods assessment and evaluation. The course is designed to introduce students to the concepts and techniques of community health improvement and the roles of assessment and evaluation. This course emphasizes the application of statistical reasoning and methods, specifically dealing with large databases. Prerequisite: PUBH 540 Statistical Methods and PUBH 560 Epidemiology

PUBH 550 - Perspectives in Environmental Health
Credit: 3
This course introduces students to an overview of basic concepts in environmental sciences, an understanding the health impact of various environmental exposures, and the public health approach to controlling and eliminating environmental health risks.

PUBH 560 - Principles in Epidemiology
Credit: 3
This course introduces students to an overview of epidemiology and its application to public health. This course emphasizes an introduction to the application of epidemiological methods. The primary goal of this course is to orient students to the field of epidemiology and foster an appreciation for the methods used to do observational studies in "real world" settings. Prerequisite: College-level statistics course.

PUBH 580 - Health Policy and Management
Credit: 3
This course introduces students to the United States health care system and examines the structure of the health care system including the policy process, program management and evaluation.

PUBH 590 - Independent Study in Public Health
Credit: 1-3
This elective course is designed to provide students with an opportunity to enhance their public health knowledge and further explore issues or a set of issues related to a particular topic in public health. This course is not related to PUBH 690 Research Project I and/or PUBH 695 Research Project II. This course will involve a minimum of 40 hours per credit hour per semester. This course will be conducted under the guidance of a major professor with consultation with the course director.

PUBH 625 - Adolescent Health
Credit: 2
This elective course examines the public health issues related to the adolescent or emerging adulthood stages of development. The course will combine lectures, a variety of texts, classroom discussions, exams, and individual papers to explore the population health dimensions of the biological and psychological distinctiveness of the adolescent population.

PUBH 661 - Epidemiology of Chronic Disease
Credit: 2
This elective course is designed to provide students with an overview of prevalence and risk factors for chronic diseases in the U.S. population and other countries. Both general and specific methodological approaches to the epidemiology of chronic diseases will be discussed. Prerequisite: PUBH 560 Principles of Epidemiology.

PUBH 671 - Public Health and Infectious Disease
Credit: 2
This elective course provides a broad overview of the effects infectious diseases have on Public Health. This course focuses on the biological aspects of various vector based pathogens that have an impact on global and rural health. Prerequisite: PUBH 501 Introduction to Public Health and permission of instructor

PUBH 682 - Ethical Issues in Rural Public Health
Credit: 3
This elective public health science course assumes an understanding of the principles of community, justice, and equity. The goal of protecting the health of a population also raises fundamental questions including when to restrict the freedom of individuals in order to protect the health of the community and the duties or obligations citizens owe back to the larger community. However,
when generating public health policy these principles and duties can be difficult to interpret or apply. These challenges are further compounded by the specific realities of community health in rural settings. This course examines where public health research and policy intersects with ethical issues and ethical dilemmas. The course involves weekly “case studies” as practical scenarios that highlight the real world ‘grey areas’ that exist between doing right and doing wrong in the context of public health.
Prerequisite: PUBH 525 Overview of Rural Health and PUBH 580 Health Policy & Management

PUBH 690 - Research Project
Credit: 3
This course will serve as a capstone experience for public health students. Pre-requisite: All other required public health courses. PUBH 550 Perspectives in Environmental Health may be a co-requisite.

PUBH 699 - Practicum in Public Health
Credit: 1-3
This required course is designed to provide students with an opportunity to enhance their public health knowledge by gaining valuable skills and tacit knowledge through practical, hands-on application of content from other coursework in a real-world public health context. This course will involve a minimum of 60 hours per credit hour per semester. This course will be conducted under the guidance of a public health faculty and consultation with the preceptor.
Dual Degree Programs

The College of Pharmacy & Health Sciences offers eight dual degree programs to provide students with specialized training.

PharmD/MBA
The College of Pharmacy & Health Sciences (CPHS) offers a PharmD/MBA dual degree in partnership with the University’s Lundy-Fettman School of Business. The MBA curriculum prepares future pharmacists for the business complexities related to pharmacy and healthcare. The business track trains students for careers in health sector management, leadership and policy, as well as owning an independent pharmacy.

The objective of the MBA program is to develop the student's analytical skills, critical thinking, problem solving and decision making capabilities and to provide the basic knowledge needed for the solution of business problems. The MBA curriculum exposes students to a variety of subjects including economics, organizational behavior, marketing, accounting, finance, management and ethics.

Students interested in pursuing the dual degree must be accepted into both programs. Upon acceptance into the PharmD program, the applicant submits an application to the MBA program and a written request to forward his or her PharmD application to the business school. If the student has not met all the prerequisite classes for the MBA program, he or she has the option to complete these during an accelerated three week summer course. Upon successful completion of the three week summer course, all requirements for admission are satisfied. Students are not required to take the GMAT, the PCAT score will be considered in lieu of the GMAT score. The MBA degree will not be conferred until the PharmD requirements are completed.

Students in the dual program may apply up to nine credit hours from the PharmD curriculum toward their MBA. Please see the Transfer of Credits section to view the list of transferable courses.

Students have the option to complete a research project in a health care administration area. This allows the student to apply pharmacy and business principles to a managerial health care problem. This option is not available to students pursuing separate pharmacy and business degrees.

Prerequisites
The following is a list of undergraduate prerequisites for the MBA program:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>Economics</td>
<td>3</td>
</tr>
<tr>
<td>International Business</td>
<td>3</td>
</tr>
<tr>
<td>Management</td>
<td>3</td>
</tr>
<tr>
<td>Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

Alternatively, students may complete BADM 510-Business Foundations, an intensive accelerated summer course (nine credit hours) covering basic concepts in accounting, economics, ethics, finance, international business, management, marketing and quantitative methods.

Program Requirements
A minimum of 36 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>BADM 710 - Accounting for Decision Making</td>
<td>3</td>
</tr>
<tr>
<td>BADM 724 - Economics for Managers</td>
<td>3</td>
</tr>
<tr>
<td>BADM 730 - Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>BADM 740 - Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>BADM 742 - Business Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BADM 750 - Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>BADM 758 - Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>BADM 760 - Contemporary Management Science Techniques</td>
<td>3</td>
</tr>
<tr>
<td>BADM 770 - Marketing Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Advanced Courses

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BADM 732 - Management of Financial Institutions</td>
<td>3</td>
</tr>
<tr>
<td>BADM 752 - Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>BADM 772 - Marketing Research</td>
<td>3</td>
</tr>
</tbody>
</table>

Transfer of Courses
Students may substitute up to nine hours of CPHS courses as advanced courses.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 511 - Jurisprudence</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 523 - Special Research Projects in Pharmacy Practice</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 525 - Ethics in Pharmacy Practice</td>
<td>2</td>
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<tr>
<td>PHAR 531 - Strategic Management in Healthcare</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 561 - Pharmacoconomics</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 583 - Advance Pharmacy Marketing &amp; Management</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 584 - Advanced Community Pharmacy Management</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 586 - Advanced Hospital Management</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 587 - Advanced Financial Management for Pharmacists</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 588 - Industrial Pharmacy Management</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 705 - Healthcare Admin. Research Project</td>
<td>1-3</td>
</tr>
</tbody>
</table>

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

Graduates are well prepared for careers in the pharmaceutical and biotechnology industries, Food and Drug Administration and Centers for Disease Control and Prevention, as well as academic careers in pharmacy and medical education.

Students pursuing the dual degree are allowed to apply certain courses to both program requirements, including elective hours.

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

The following MSCR courses must be taken in conjunction with the PharmD curriculum for the fulfillment of the dual program:

Courses
CLNR 505 - Principles of Clinical Research
CLNR 515 - New Product Development
CLNR 518 - Experimental Design & Biostatistics
CLNR 519/519L - Physical & Clinical Assessment and Lab
CLNR 520 - Advanced Data Management
CLNR 525 - Medical Ethics
CLNR 530 - Regulatory Affairs
CLNR 552 - Scientific Communications
CLNR 559 - Managing & Monitoring Clinical Trials
CLNR 566 - Advanced Study Design & Analysis
CLNR 568 - Project Management
CLNR 606 - Clinical Research Seminar
CLNR 690 - Research Project I
CLNR 691 - Research Project II
CLNR 694 - Research Project III
CLNR 695 - Research Project IV

PharmD/MS in Pharmaceutical Sciences

The dual PharmD/MSPS program is suited for candidates who hold a bachelor’s degree in pharmaceutical sciences, chemistry, biology or physics. The MSPS curriculum was designed to enhance individual’s research and contract service capabilities. Students who complete this degree are prepared for careers in drug discovery and development or further studies at the doctor of philosophy level.

Students have the option to start the master’s program one year earlier or at the same time of entry into the PharmD program. Students can complete both degrees in five years, with the recommendation to complete the first year of MSPS coursework prior to entering the PharmD program, then integrating the remaining MSPS courses into the four professional years of the PharmD program.

Students pursuing the dual degree are allowed to apply certain courses to both program requirements, including elective hours. Four of the six required hours in the master’s research project can be applied as one of the nine required clinical rotations completed during the fourth year in the PharmD program. These options are not available to students pursuing separate degrees.

Students interested in pursuing the dual degree must be accepted into both programs. View the Pharmaceutical Sciences section of the academic bulletin for admissions requirements and curriculum.

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

Program Requirements

Below is a curriculum example for the pharmacology track, view the MSPS curriculum for course listings in all five tracks. Curriculum for the dual degree is worked out on an individual basis.

First Graduate Year

Fall Courses
PHSC 512 - Fundamentals of Cellular Pharmacology
PHSC 526 - Protein Analysis and Bioassays
PHSC 534 - M.S. Seminar I

Spring Courses
PHSC 592 - Adv Cellular and Molecular Pharm.
PHSC 508 - Product and Process Validation
PHSC 574 - Graduate Biopharmaceutics
PHSC 536 - M.S. Seminar II

First Professional Year

P-1 Fall Semester
PHAR 302 - Anatomy and Physiology
PHAR 304 - Biochemistry
PHAR 312 - Medical Microbiology
PHAR 301 - Pharmaceutical Calculations
PHAR 305 - Pharmacy in the US Healthcare Systems
PHAR 309 - Drug Information
PHAR 331 - Pharmaceutical Care Skills Lab

P-1 Spring Semester
PHAR 306 - Anatomy and Physiology
PHAR 303 - Patient Counseling and Professional Communication
PHAR 310 - Immunology
PHAR 308 - Clinical Biochemistry
PHAR 307 - Pharmacy Marketing and Management
PHAR 332 - Pharmaceutical Care Skills Lab

P-1 Summer Semester (One Month)
PHAR 505 - Early Practice Experience I

Second Professional Year

P-2 Fall Semester
PHAR 412/417 - Pharmacology and Medicinal Chemistry I & II
PHAR 408 - Biology of Disease
PHAR 404 - Pharmaceutics I
PHAR 510 - Graduate Pharmacokinetics
PHAR 590 - Adv. Pharmacology and Toxicology

P-2 Spring Semester
PHAR 421/423 - Pharmacology and Medicinal Chemistry III & IV
PHAR 406 - Pharmaceutics II/Lab
PHAR 403 - Financial Management and Pharmacoeconomics
PHAR 405 - Nonprescription Drug Therapy

P-2 Summer Semester (One Month)
PHAR 507 - Early Practice Experience II

Third Professional Year

P-3 Fall Semester
PHAR 501 - Therapeutics I
PHAR 503 - Therapeutics II
PHAR 528 - Experimental Design and Biostatistics
PHAR 511 - Jurisprudence
PHAR 508 - Top 300 Examination
PHAR 5XX - PharmD/PHSC Electives
PHAR 510 - Research Project I

P-3 Spring Semester
PHAR 545 - Therapeutics III
PHAR 547 - Therapeutics IV
PHAR 509 - Therapeutic Drug Monitoring
PHAR 544 - Intro to Clinical Res. Design and Lit. Eval.
PHAR 519 - Physical Assessment
PHAR 5XX - PharmD/PHSC Electives

Fourth Professional Year

P-4 Summer, Fall and Spring Semesters
PHAR 6XX - Advanced Pharmacy Practice Experiences (nine one-month rotations)
PHAR 699 - Professional Presentation Seminar
PHAR 620 - Research Project II (Can count as one Advanced Pharmacy Practice Experience)
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.

Typically students finish their PharmD degree, and then spend an additional year to obtain their MSPH. 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 682 – Ethical Issues in Public Health
PUBH 502 – Seminar in Public Health
PUBH 699 – Practicum in Public Health

Summer
PUBH 541 – Community Health Assessment & Evaluation
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 pharmacy curriculum. The following two courses are required electives toward the MSPH degree.

- PHAR 528 - Experimental Design & Biostatistics
- PHAR 544 - Introduction to Clinical Research Design and Literature evaluation

Optional Electives
Students may choose four credits from the following list of approved courses. Other pharmacy courses (excluding courses required for completion of the PharmD degree) may be requested, subject to the prior consent of the associate dean for academic affairs and the chair of public health.

- PHAR 512 - Multicultural Health Practices Health Disparities
- PHAR 518 - General Toxicology
- PHAR 521 - Substance Abuse Education
- PHAR 531 - Strategic Management in Healthcare
- PHAR 535 - HIV/AIDS
- PHAR 548 - Advanced Nonprescription Drug Therapy
- PHAR 551 - Legal Topics
- PHAR 561 - Pharmacoeconomics
- PHAR 563 - Managed Care
- PHAR 565 - Epidemiology
- PHAR 590 - Smoking Cessation
- PHAR 593 - Leadership Development
- PHAR 593 - Pharmacogenetics
- PHAR 595 - Bioterrorism and Mass Public Health Threats

MPAP/MS in Public Health
The Master of Physician Assistant Practice/ MS in Public Health dual degree program gives students an opportunity to pursue both clinical and public health training so they can function not only as clinicians but also contribute as community health leaders, educators, and policy makers, affecting the local, state and national health care systems.

The dual degree program is open to accepted and enrolled physician assistant students. This additional one-year program provides 32 credit hours of public health courses. Interested PA students must complete a separate application for the public health program as well as an additional application to receive dual degree status.

Students will spend their first year completing the MSPH coursework (including fall, spring and summer semesters). The following year, students enter the PA Program to complete the required 24 month PA curriculum, in addition to their MSPH research project. The year as an MSPH student will be solely devoted to public health curriculum.

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

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

Spring
PUBH 560 – Epidemiology
PUBH 520 – Health Education & Promotion
PUBH 682 – Ethical Issues in Public Health
PUBH 502 – Seminar in Public Health
PUBH 699 – Practicum in Public Health

Summer
PUBH 541 – Community Health Assessment & Evaluation
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 the following courses from the PA curriculum that count as electives toward the MSPH degree.

- MPAP 509 – Evidence Based Medicine I, EBM-I
- MPAP 609 – Evidence Based Medicine II, EBM-II

Juris Doctor/MS in Public Health
A joint offering with Campbell University’s School of Law, the JD/MSPH dual degree program provides students with a unique interdisciplinary perspective of law and public health. Graduates will enter the workplace prepared to represent clients, health organizations or systems and serve in leadership roles in health policy at the national, state, county and local levels.

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

Interested law students must complete
a separate application for the public health program as well as an additional application to receive dual degree status. GRE scores will be waived for students who have a letter of acceptance from the law program.

Typically dual degree students complete the public health coursework between their first and second year of law school. Following the year of public health study, students return to law school for their final two years of required coursework. The year as an MSPH student will be solely devoted to public health curriculum. All law classes are held at the Law School’s campus in Raleigh, and public health coursework on Campbell’s main campus in Buies Creek.

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

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

Spring
PUBH 540 – Epidemiology
PUBH 520 – Health Education & Promotion
PUBH 682 – Ethical Issues in Public Health
PUBH 502 – Seminar in Public Health
PUBH 699 – Practicum in Public Health

Summer
PUBH 541 – Community Health Assessment & Evaluation
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. Other law courses (excluding courses required for completion of the JD degree) may be requested, subject to the prior consent of the law school’s associate dean for academic affairs, and the chair of public health).

- Administrative Law
- 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
- Community Health Assessment and Evaluation

MS in Clinical Research/ MBA
A joint offering with the Lundy-Fetterman School of Business, the MS in ClinicalResearch/ Master of Business Administration dual degree provides students who are interested in the clinical research and business industries the opportunity to further develop their management skills, gain exposure to various areas of business, and expand their leadership and problem solving abilities.

The objective of the dual MSCR/MBA program is to develop graduates who are well-versed in the understanding of clinical research, drug development and epidemiology, as well as competent in the business world. Students will be exposed to essential business practices including economics, organizational behavior, marketing, accounting, finance, management and ethics.

MSCR/MBA students will be required to complete the required, core MBA courses (27 credit hours):
- BADM 710 – Accounting for Decision Making
- BADM 724 – Economics for Managers
- BADM 730 – Financial Management
- BADM 740 – Legal Environment of Business
- BADM 742 – Business Ethics
- BADM 750 – Organizational Behavior
- BADM 758 – Strategic Management
- BADM 760 – Contemporary Management Science Techniques
- BADM 770 – Marketing Management

MSCR/MBA students will be required to complete nine credit hours of elective courses. They may select from either the Lundy-Fetterman School of Business graduate advanced courses or the Department of Clinical Research electives.

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

MS in Public Health/MBA
A joint offering with the Lundy-Fetterman School of Business, the MS in Public Health/ Master of Business Administration dual degree provides students with a set of complementary knowledge and skills in the research, clinical, policy and administrative domains. Graduates will be well prepared for leadership roles in healthcare administration.

The objective of the dual MSPH/MBA program is to develop graduates who are well-versed in the understanding of public health, local health care disparities, and development of local community health intervention and education programs. Graduates will also be competent in the business world. Students will be exposed to essential business practices including economics, organizational behavior, marketing, accounting, finance, management and ethics.
Program Requirements
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 580 - Health Policy and Management
- PUBH 662 - Public Health Biology
- PUBH 682 - Ethics in Rural Public Health
- PUBH 690 - Research Project I
- PUBH 699 - Public Health Practicum

MSPH/MBA students will be required to complete the required, core MBA courses (27 credit hours):

- BADM 710 – Accounting for Decision Making
- BADM 724 – Economics for Managers
- BADM 730 – Financial Management
- BADM 740 – Legal Environment of Business
- BADM 742 – Business Ethics
- BADM 750 – Organizational Behavior
- BADM 758 – Strategic Management
- BADM 760 – Contemporary Management Science Techniques
- BADM 770 – Marketing Management

Three MSPH courses (9 credit hours) will be counted toward the completion of the MBA:

- PUBH 540 – Statistical Methods
- PUBH 580 – Health Policy and Management
- PUBH 690 – Research Project (with a focus in healthcare administration)