

Shenandoah University's renewal application to operate
as an out-of-state institution in Maryland in accordance
with COMAR 13B.02.01

OOS RENEWAL

MARYLAND HIGHER EDUCATION COMMISSION Application for Renewal Approval for Out-of-State Degree-Granting Institutions to Operate in Maryland

Please Note: A separate application form must be completed and submitted with all supporting documentation for each proposed location in Maryland. If an additional, new location is being proposed, an *Application for Renewal of Approval* must be submitted for that location.

PREVIOUSLY APPROVED LOCATION IN MARYLAND.

Please provide the complete mailing address.

Programs approved: Physical Therapy, Occupational Therapy, Physician Assistant Studies, Athletic Training, MSN-Midwifery, MSN-Psych Mental Health. We are applying for renewal for Physical Therapy, Occupational Therapy, and Physician Assistant Studies. In addition, we are again requesting approval for the PharmD and MSN-FNP programs.

PROPOSED START DATE OF CONTINUED OPERATION. 8/31/2015

Applications should be submitted at least 5 months prior to the proposed start date.

NAME AND ADDRESS OF INSTITUTION APPLYING FOR APPROVAL.

Name of Institution: Shenandoah University	
Web Address: www.su.edu	
OPEID Code: 003737 <small>U.S. Department of Education, Office of Postsecondary Education, ID Code – Title IV eligibility.</small>	
Chief Executives Officer: Tracy Fitzsimmons (President)	
Mailing Address:	1460 University Drive, Winchester, VA 22601
Telephone:	(540) 665-4505
Email:	tfitzsim@su.edu

Institutional Liaison: Name and title of the individual who will serve as liaison to the Maryland Higher Education Commission:

Name: Adrienne Bloss

Title: Vice President for Academic Affairs

Mailing Address: 1460 University Drive, Winchester, VA 22601

Telephone: (540) 665-4525

Email: abloss@su.edu

***** CERTIFICATION *****

I hereby affirm that the answers given in this application and its attachments are accurate and complete and further agree to comply with the *Annotated Code of Maryland* and State regulations governing the operation of out-of-State degree-granting institutions (COMAR 13B.02:01).

8-3-15
Date
Tracy Fitzmaurice
Signature of Chief Executive Officer

Please Submit All Information To:

Maryland Higher Education Commission
Division of Planning and Academic Affairs
6 N. Liberty Street, 10th Floor
Baltimore, MD 21201
410-767-3268
acadprop@mhec.state.md.us

A copy of these regulations can be found at the Maryland Higher Education Commission's web site www.mhec.state.md.us (under Academic Approval Process) along with an on-line application form.

I. DURATION OF APPROVAL

Approval to operate at a previously approved location in Maryland must be renewed annually. However, "during of after the fifth year of operation in Maryland and during any subsequent renewal cycle, an out-of-State institution may apply for approval to operate in Maryland for an extended period of time up to 5 years." COMAR 13B.02.01.08C(1)

If the location for which you are applying has been annually approved for at least five years, do you wish to seek approval to operate in the State for an extended period of time of up to 5 years?
 Yes, we wish to be approved for _____ years.

II. SUPPORTING DOCUMENTATION

Only a complete application can be acted upon. While separate application forms must be completed and submitted for each approved location, the following Supporting Documentation needs to be included only once for each entire package of applications. **CHECK EACH ITEM AS ATTACHED.**

Catalogs and Other Institutional Publications. COMAR 13B.02.01.20A(1)

previously submitted ✓

Have your catalogs, other institutional publications, or awards changed since they were last submitted? Yes No If yes, please submit new copies.

Application Fee. (Must accompany all renewals) COMAR 13B.02.01.08B(2)

previously submitted ✓

The institution shall submit a non-refundable application fee in the amount of (a) \$7,500 for up to two degree programs and (b) an additional \$850 for each degree program over two programs. The institution's check should be made payable to: Maryland Higher Education Commission. The application renewal fee will be waived for renewals of out-of-state institutions operating at Regional Maryland Higher Education Center.

- Accreditation. (Must accompany all renewals) COMAR 13B.02.01.08B(4)(g) ✓

Provide a copy of the most recent letter of approval (notification) from an organization recognized as an accrediting agency by the U.S. Department of Education. Along with your most recent notification of institutional accreditation, please provide evidence that you are in compliance with that organization's policies and procedures related to off-campus educational activities. If any of your proposed programs require program accreditation provide evidence of that accreditation.

- Registration as an Out-of-State Corporation. (Must accompany all renewals) ✓
COMAR 13B.02.01.08B(4)(f)

To transact interstate business in Maryland, the institution must qualify with the State Department of Assessments and Taxation by making the certification required in the Corporations and Associations Article, §7-202, Annotated Code of Maryland. A public institution is not required to qualify as a foreign corporation. However, a business entity affiliated with a public institution or a private institution (profit or non-profit) must qualify as a foreign corporation. The Foreign Corporation Qualification Form may be obtained from the Maryland Department of Assessments and Taxation, Room 809, 301 West Preston Street, Baltimore, Maryland 21201 or on-line at: www.dat.state.md.us. Once qualified, the institution must provide a copy of the certificate of good standing issued by the State Department of Assessments and Taxation.

- Certificate of Compliance With Fire and Safety Codes (Must accompany all renewals) *Not required* ✓
COMAR 13B.02.01.08B(4)(o)

Please provide a certificate for each approved location for indicating that the proposed facility has been inspected and is found in compliance with local and State ordinances pertaining to fire and safety.

- Board of Trustees Resolution of Financial Solvency (Must accompany all renewals) ✓
COMAR 13B.02.01.08B(4)(e)

Please provide a resolution from your Board of Trustees addressed to the Secretary of Higher Education stating that your institution is financially solvent.

- Advertisements COMAR 13B.02.01.07D(3)(p) ✓

Are there new advertisements in print format related to your programs in Maryland?

- Yes No If yes, please provide copies of the new advertisements. ✓

- Enrollment Data as Prescribed by the Secretary. (Must accompany all renewals) ✓
COMAR 13B.02.01.08B(4)(q)

Please provide the information requested on the Student Enrollment Data Form found at the end of this application.

- Teach-out Plan (Must accompany all renewals) COMAR 13B.02.01.08B(4)(j)(iv) ✓

The institution must provide a copy of its teach-out plan allowing enrolled students to complete their programs if the institution decides to cease operation in Maryland.

II. APPLICATION QUESTIONNAIRE

This questionnaire, properly completed with supporting documentation, shall serve as an application for approval to operate in Maryland under the *Code of Maryland Regulations* (COMAR) 13B.02.01. It must be completed for each proposed location.

1. Programs.

➤ CURRENTLY OFFERED PROGRAMS.

INSTRUCTIONS. Please enter the requested information on your **CURRENTLY OFFERED PROGRAMS** in the spaces provided below, or create an attachment (labeled "A-1: Current Programs") to this application with the required information.

(a) Provide a list of your currently offered programs at this location. For each program provide the following information: (1) the full title of the program; (2) the degree or certificate to be awarded; (3) the mode of instructional delivery; (4) the number of credit hours (semester or quarter); and (5) whether they are offered at the parent campus.

Program Title	Degree	Mode of Instruction	Total Credit Hours	Offered on Main Campus Yes / No
<i>Example: Organizational Management</i>	<i>M.S.</i>	<i>Classroom</i>	<i>36 sem</i>	<i>Yes</i>
<i>Example: Business Administration</i>	<i>B.S.B</i>	<i>Distance Ed.</i>	<i>120 sem</i>	<i>Yes</i>

➤ NEW PROGRAMS

INSTRUCTIONS. Is the institution proposing any new programs at this location? Yes No
If yes, please enter the requested information in the spaces provided below, or create an attachment (labeled "A-1: New Programs") to this information with your responses to the following for each new program:

(a) Provide a list of the new programs at this location. For each new program provide the following information: (1) the full title of the program; (2) the degree or certificate to be awarded; (3) the mode of instructional delivery; (4) the number of credit hours (semester or quarter); and (5) whether they are offered at the parent campus.

A-1: Currently Offered Programs

Shenandoah University seeks to renew approval for clinical placements in Maryland for the following programs in the health professions:

Doctor of Physical Therapy

M.S. in Occupational Therapy

M.S. in Physician Assistant Studies

The following courses within these programs may be offered at clinical sites in Maryland:

Program	Related Courses	Mode of Instruction	Credit Hrs	On Main Campus?
Doctor of Physical Therapy	Clinical Practicum I, II, III	Clinical	1	no
	Clinical Internship I	Clinical	3	no
	Clinical Internship II, III	Clinical	6	no
MS in Occupational Therapy	Level 2 Fieldwork	Clinical	6	no
	Community Application; with Individuals & in Systems	Clinical	2	no
	Level I Fieldwork; Basic and Bridge	Clinical	1	no
MS in Physician Assistant Studies	Community Preceptorship Clinical Practicum	Clinical	4	no
	Primary Care Clinical Practicums (II, III, IV)	Clinical	7.5	no
	Primary Care Clinical Practicum	Clinical	2	no
	Emergency Medicine Clinical Practicum	Clinical	2.5	no
	Surgical Clinical Practicum	Clinical	2.5	no
	Inpatient Medicine Clinical Practicum	Clinical	2.5	no
Elective Clinical Practicum	Clinical	2.5	no	

A-1: New Programs

Shenandoah University seeks approval for clinical placements in Maryland for the following programs in the health professions:

Doctor of Pharmacy

M.S.N. – Family Nurse Practitioner

The following courses within these programs may be offered at clinical sites in Maryland:

Program	Related Courses	Mode of Instruction	Credit Hrs	On Main Campus?
Doctor of Pharmacy (PharmD)	PHAR 800 Ambulatory Care APPE	Clinical	5	no
	PHAR 801 Community Clinical APPE	Clinical	5	no
	PHAR 803 Inpatient Acute Care APPE	Clinical	5	no
	PHAR 804 Institutional APPE	Clinical	5	no
	PHAR 806 and 807 Selective APPEs	Clinical	5	no
	PHAR 808 Advanced Pharmacy APPE	Clinical	5	no
	PHAR 516 Introductory Pharmacy Practice Experience I	Clinical	2	no
	PHAR 517 Introductory Pharmacy Practice Experience II	Clinical	2	no
	PHAR 667 Introductory Pharmacy Practice Experience III	Clinical	1	no
	PHAR 670 Introductory Pharmacy Practice Experience IV	Clinical	1	no
	PHAR 738 Introductory Pharmacy Practice Experience V	Clinical	1	no
	PHRN 800 Ambulatory Care APPE	Clinical	5	no
	PHRN 802 Medication Information APPE	Clinical	5	no
	PHRN 803 Inpatient Acute Care APPE	Clinical	5	no
MSN-Family Nurse Practitioner	NPLB650 Primary Care of Families Practicum I	Clinical	3	no
	NPLB670 Primary Care of Families Practicum II	Clinical	3	no
	NPLB680 Advanced Primary Care Practicum	Clinical	4	no

Program Title	Degree	Mode of Instruction	Total Credit Hours	Offered on Main Campus Yes / No
<i>Example: Organizational Management</i>	<i>M.S.</i>	<i>Classroom</i>	<i>36 sem</i>	<i>Yes</i>
<i>Example: Business Administration</i>	<i>B.S.B</i>	<i>Distance Ed.</i>	<i>120 sem</i>	<i>Yes</i>

(b) If the information does not appear in the catalog or publication you submitted provide (1) a description of the curriculum; (2) the objectives of each course; and (3) a course schedule for the proposed location

N/A

(c) Please provide a brief description of the student population to be served by the proposed new programs.

The traditional PharmD program serves students who have completed the undergraduate prerequisites and wish to enter with pharmacy profession. The non-traditional PharmD serves U.S-licensed pharmacists who hold a Bachelor of Science in Pharmacy and wish to expand their education. The MSN-FNP program serves registered nurses who have at least an associate's degree and who wish to practice in the primary care role in urban, suburban, rural or underserved areas, teach in nursing schools, or continue their higher education.

2. Educational Need. Before the Commission may evaluate the readiness of an out-of-State institution to operate or award new degrees in the State, including the offering of an instructional program or a degree level not previously approved, the institution shall present evidence demonstrating the educational need to establish operations, offer programs, and award the degrees in question in the State. In addition, the out-of-State institution shall demonstrate that the proposed program, for which the institution is making application, meets a critical and compelling regional or Statewide need and is consistent with the Maryland Postsecondary Education. COMAR 13B.02.01.06A&C

INSTRUCTIONS: Please enter the requested information in the spaces provided below, or create an attachment (labeled "A-2: Educational Need") to this application and respond to the following questions for each new program:

(a) What critical and compelling Regional or Statewide (Maryland) need and demand do your proposed programs meet? In responding to this question provide documentation as indicated below:

(1) If the programs serve occupational needs, present data projecting market demand and the availability of openings in the job market to be served by the new programs for which the institution is making application. This information may include workforce and employment projections prepared by the federal and State governments, the availability of graduates in the State or region, marketing studies done by the institution or others, and material from professional and trade associations.

See attached

(2) If the programs serve societal needs (include the traditional liberal arts education), provide a Description of how the proposed programs will enhance higher education in Maryland and contribute society

See attached

(b) If similar programs exist in the State, what are the similarities or differences in your program in terms of the degrees to be awarded, the areas of specialization, and the specific academic content of the programs?

See attached

(c) Is a Maryland employer sponsoring/supporting the application for the program(s) to be offered at this location?

Yes No

If yes, please attach a letter of support from the employer addressed to the Assistant Secretary, Planning and Academic Affairs. The letter should outline the employer's reasons for selecting the institution and its programs and state the benefits to the employees who participate in the program

3. Administrative Staff. The out-of-State institution shall provide for an on-site administrative staff responsible for overall administrative operation of educational activities including counseling, advising, testing orientation, financial aid services, and maintenance of academic records. In addition to being responsible for the administration of the policies and procedures of the parent institution, the designated administrators are responsible for meeting the expectations set forth in this chapter [of the Regulatory Standards of the State of Maryland for Out-of-State Institutions]. The duties and size of the staff shall be adequate for the size of the educational activities offered. COMAR 13B.02.01.15

INSTRUCTIONS: Has any previously reported Administrative Staff information changed since your last approval at this location? Yes No

If yes, please enter the requested information in the spaces provided below, or create an attachment labeled (labeled "A-3: Administrative Staff Changes") to this application with any changes to the following questions:

(a) How are you planning to meet the above standard on Administrative Staff?

See attached

(b) Who will be assigned to carry-out each of these duties? Please include a curriculum vitae/resume for each administrator.

See attached

4. Faculty

INSTRUCTIONS: Has any previously reported Faculty information changed since your last approval at this location? Yes No

If yes, please enter the requested information in the spaces provided below, or create an attachment labeled (labeled "A-4: Faculty Changes") with any changes to the following questions:

(a) List all faculty that are to teach in the first year (or cycle) of the programs at this location. For each faculty member provide the following information: COMAR 13B.02.01.08(4)(m)

- (1) the course(s) the faculty might soon teach;
- (2) the degrees the individual holds
- (3) the degrees areas of specialization; and
- (4) whether or not the faculty member is full-time or part-time (adjunct) at your parent institution

See attached

(b) Please include a curriculum vitae/resume for each potential faculty member. For those faculty who are yet to be hired include a job description and minimal qualifications.

5. Library Resources. Out-of-State Institutions offering programs or courses, or both, in Maryland, shall provide adequate and appropriate library resources within State boundaries and within reasonable distance of the instructional site. Usage statistics shall be kept to determine to what extent these resources are available and accessible. COMAR 13B.02.01.17A

INSTRUCTIONS: Has any previously reported library information changed since your last approval at this location? Yes No

If yes, please enter the requested information in the spaces provided below, or create an attachment (labeled "A-5: Library Changes") to this application with any changes to the following questions.

(a) How are you planning to meet this standard on Library Resources? Briefly describe the types of materials and titles that you will make available to your students and how they will access them. Will there be provision for bibliographic instruction and/or library orientation?

See attached

6. Student Services. COMAR 13B.02.01.18 concerns student services and activities. These shall realistically reflect the stated objectives, purposes, and philosophy of the out-of-State institution. Further, an out-of-State institution shall ensure that all students have access to a well developed program of counseling, testing, advisement, orientation, financial aid, career development, and placement. The institution may determine the specific organization of services, as well as the resources and staffing

provided, as long as provision for these services are made. Student activities that complement the instructional program are particularly encouraged. COMAR Section .18 also requires that the out-of-State institutions keep complete and accurate records of admission, enrollment, grades, scholarships, transfer of credits, transcripts, graduates, and other essentials in accordance with standard practice. This includes the physical security and confidentiality of such records. The Section requires as well, a published statement of student rights, privileges, and responsibilities and the school's adherence to its student grievance procedures.

INSTRUCTIONS: Has any previously reported Student Services information changed since your last approval at this location? Yes No

If yes, please enter the requested information in the spaces provided below, or create an attachment (labeled "A-6: Student Services") to this application with any changes to the following questions.

(a) How do you plan to implement the requirements for Student Services cited above?

See attached

(b) Regarding student records describe the security measures the institution takes to ensure the confidentiality, physical, and electronic security of your record-keeping system.

See attached

(c) Does the institution have a published statement of rights, privileges, and responsibilities of students?

Yes No How will it make this available to its students at the proposed instructional site? _____

If this statement is in the Catalog you submitted with the application, please indicate the page number: _____

If not in the Catalog you submitted, please provide us with a copy of the statement.

(d) Does the institution have a published student grievance procedure? Yes No If this procedure is in the Catalog you submitted with the application, please indicate the page number _____. If not in the Catalog you submitted, please provide us with a copy of the grievance procedure.

7. **Facilities.** (See COMAR 13B.02.01.19).

INSTRUCTIONS: Has any previously reported Student Services information changed since your last approval at this location? Yes No

If yes to either question, please enter the requested information in the spaces provided below, or create an attachment (labeled "A-7: Facilities") to this application with any changes to the following questions.

(a) Has a specific facility been inspected and approved for use as a classroom/laboratory space and been found in compliance with local and State ordinance pertaining to fire and safety? Yes No

(1) **If yes,** please provide a copy of the Certificate of Compliance.

(2) **If no,** the Certificate of Compliance must be submitted at least 30 days prior to the start of classes.

(b) Describe any special instructional facilities and equipment (computers, audio-visual equipment, etc.) that will be used and available to students in this location.

See attached

(c) Describe what provisions are being made for periodic repair and maintenance of buildings and grounds. What measures are being taken for campus security and fire protection? If dangerous or toxic materials are being handled, what provisions are being made for safe storage, handling and disposal?

See attached

(d) Describe the office (and conference) space available to full and part-time faculty and administrators.

See attached

8. Distance Education. "Distance education" means course work for academic credit delivered by telecommunicated instruction to a physical space specifically reserved for the purpose of receiving the instruction, for example, a teleclassroom, and requires the payment of tuition or fees for the instruction. "Distance education" does not include telecommunicated instruction at the student's initiation via an individual personal computer. COMAR 13B.02.01.03(8). An institution operating in Maryland and delivering instruction in Maryland by distance education shall provide evidence to the Secretary of compliance with the standards of good practice found in COMAR 13B.02.01.21.

INSTRUCTIONS. Is the institution providing distance education as defined above? Yes No
If yes, please contact the staff at the Maryland Higher Education Commission for a copy of the Standards of Good Practice and provide evidence of compliance as an attachment (labeled "A-8: Distance Education") to this application

Accreditation

II. ACCREDITATION



August 8, 2012

Dr. Tracy Fitzsimmons
President
Shenandoah University
1460 University Drive
Winchester, VA 22601

Dear Dr. Fitzsimmons:

This letter will verify that Shenandoah University is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award Associate's, Bachelor's, Master's, and Doctoral degrees. The following off-campus instructional sites are included in that accreditation:

- Home campus: 1460 University Drive, Winchester, VA 22601

Off-campus instructional sites:

- Health Professions Building: 1775 North Sector Court, Winchester, VA 22601
- Cork Street Building: 333 Cork Street, Winchester, VA 22601
- James L. Bowman Building: 20 South Cameron Street, Winchester, VA 22601
- Medical Office Building II: 190 Campus Boulevard, Suite 430, Winchester, VA 22601
- Northern Virginia-Leesburg: 44160 Scholar Plaza, Suite 100, Leesburg, VA 20176

Sincerely,

A handwritten signature in cursive script that reads "Belle S. Wheelan".

Belle S. Wheelan, Ph.D.
President

BSW/SLA:efk

cc: Dr. Bryon Lee Grigsby, Senior Vice President and Vice President for Academic Affairs
Dr. Barry D. Goldstein

November 1, 2009



Commission on
Collegiate Nursing
Education

Serving the
Public Interest
Through Quality
Accreditation

One Dupont Circle, NW
Suite 530
Washington, DC
20036-1120
202-887-6791
fax 202-887-8476
www.aacn.nche.edu

Kathryn M. Ganske, PhD, RN
Director
Division of Nursing
Shenandoah University
1775 North Sector Court
Winchester, VA 22601-5195

Dear Dr. Ganske:

On behalf of the Commission on Collegiate Nursing Education (CCNE), I am pleased to advise you that the CCNE Board of Commissioners acted at its meeting on October 1-3, 2009, to grant accreditation of the baccalaureate degree program in nursing and master's degree program in nursing at Shenandoah University for the term of 10 years, extending to December 31, 2019. These accreditation actions are retroactive to April 20, 2009, which is the first day of the programs' most recent CCNE on-site evaluation. You should plan for the next on-site evaluation to take place in the spring of 2019.

At its meeting, the Board determined that the programs met all four accreditation standards. The Board additionally determined that there are no compliance concerns with respect to the key elements.

As is required for all accredited programs, the Board requested that the programs submit a Continuous Improvement Progress Report (CIPR) at the mid-point of the accreditation term. The CIPR should address the nursing programs' continued compliance with all accreditation standards that are in effect at the time of submission of the report. The deadline for submitting the progress report to CCNE is December 1, 2014. The Report Review Committee, and then the Board of Commissioners, will review the progress report in the spring of 2015. For more information about CIPRs, please refer to the CCNE *Procedures for Accreditation of Baccalaureate and Graduate Degree Nursing Programs*, available at <http://www.aacn.nche.edu/Accreditation/pdf/Procedures.pdf>.

Please note that the CCNE standards will have been revised by the time the aforementioned report is due, and the programs will need to address the standards that are in effect at that time. CCNE will provide programs with the appropriate set of standards when this information is available.

A copy of the accreditation report that was sent to you earlier, along with your response to it, is being transmitted to the institution's chief executive officer as the Commission's official report to Shenandoah University. We hope that both the results of your self-study process and the accreditation report will be useful to the continued growth and development of the nursing programs. Certificates of accreditation are enclosed.

As a reminder, programs are expected to continue to comply with the CCNE standards and procedures throughout the period of accreditation. This includes advising CCNE in the event of any substantive change in your nursing programs or of any major organizational changes that may affect the programs' administration, scope, or quality. Substantive change notifications must be submitted to CCNE no earlier than 90 days prior to implementation or occurrence of the change, but no

later than 90 after implementation or occurrence of the change. These reporting requirements are discussed further in the CCNE *Procedures*.

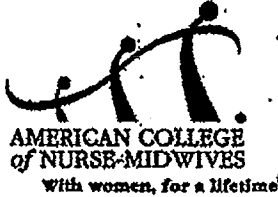
We appreciate the many courtesies and the helpfulness extended to the CCNE evaluation team in the spring of 2009. The Commissioners join me in expressing our best wishes as you proceed with tasks important to the future of your nursing programs.

Sincerely,

Harriet R. Feldman

Harriet R. Feldman, PhD, RN, FAAN
Chair, Board of Commissioners

cc: President Tracy Fitzsimmons
CCNE Board of Commissioners
CCNE Accreditation Review Committee
CCNE Evaluation Team



February 2, 2006

Dr. Sheila Ralph, RN, DNSc, FAAN
Director, Division of Nursing
Shenandoah University
1775 N. Sector Ct.
Winchester, VA 22601

Dear Dr. Ralph

The Board of Review (BOR) of the Division of Accreditation (DOA) of the American College of Nurse-Midwives (ACNM) met January 21, 2006. The BOR reviewed the Progress Report submitted in September 2005 by the Shenandoah University Nurse-Midwifery Track. The BOR found that all accreditation criteria are now fully met.

The decision of the BOR is to grant accreditation without recommendations for ten (10) years. Based on the date of the last site visit, the next Self-Evaluation Report (SER) and site visit will be due in Spring 2015 for review at the BOR meeting in June 2015.

The BOR wishes to commend Dr. Juliana Fehr, Coordinator of the Nurse-Midwifery Track, and the nurse-midwifery faculty and students for their contributions to the profession. The BOR wishes you continued success.

Sincerely,

Barbara Decker, CNM, PhD, FACNM
Chair, Board of Review

Cc: Dr. Juliana van Olphen Fehr, CNM, PhD
Coordinator, Nurse-Midwifery

Diane Boyer, CNM, PhD, FACNM
Chair, DOA

Laraine Guyette, CNM, PhD, FACNM
Coordinator, DOA Site Visitor Panel



Commission on Accreditation
of Athletic Training Education

2201 Double Creek Drive, Suite 5006
Round Rock, TX 78664
Phone: 512/733-9700
Fax: 512/733-9701
Email: caate@sbcglobal.net
Website: www.caate.net

March 16, 2010

Tracy Fitzsimmons, PhD
President
Shenandoah University
1460 University Drive
Winchester, VA 22601

Dear President Fitzsimmons:

Congratulations! Based upon a positive review of the Progress Report submitted to the CAATE by the December 1, 2009 deadline, the date of your next required comprehensive review for accreditation of the Athletic Training Education Program at Shenandoah University, including an on-site review, has been extended to the 2018 - 2019 academic year.

The nationally-recognized Standards for Entry-Level Athletic Training Education were established with support of the following sponsoring organizations: the American Academy of Family Physicians, the American Academy of Pediatrics, the American Orthopaedic Society for Sports Medicine, and the National Athletic Trainers' Association, Inc.

The Commission on Accreditation of Athletic Training Education commends the faculty, staff, and administrators at Shenandoah University for your commitment to the advancement of quality education in Athletic Training, as well as your dedication to the preparation of highly qualified Athletic Training professionals.

Sincerely,

Greg Gardner, EdD, ATC
President, CAATE

Cc: Bryon Grigsby, PhD, Vice President for Academic Affairs
Rose Schmiege, DHS, Program Director, Athletic Training Education

Sponsoring Agencies

The American Academy of Family Physicians
The American Orthopaedic Society for Sports Medicine

The American Academy of Pediatrics
The National Athletic Trainers' Association, Inc.

November 15, 2010

Kathryn M. Ganske, PhD, RN
Director
Division of Nursing
Shenandoah University
1775 North Sector Court
Winchester, VA 22601-5195

Commission on
Collegiate Nursing
Education

Serving the
Public Interest
Through Quality
Accreditation

Dear Dr. Ganske:

On behalf of the Commission on Collegiate Nursing Education (CCNE), I am pleased to advise you that the CCNE Board of Commissioners acted at its meeting on October 14-16, 2010, to grant accreditation of the Doctor of Nursing Practice (DNP) program at Shenandoah University for the term of 5 years, extending to December 31, 2015. The accreditation action is effective as of March 3, 2010, which was the first day of the program's recent CCNE on-site evaluation. You should plan for the next on-site evaluation to take place in the spring of 2015.

At its meeting, the Board determined that the program met all four accreditation standards. The Board additionally determined that there are no compliance concerns with respect to the key elements.

As is required for all accredited programs, the Board requested that the program submit a Continuous Improvement Progress Report (CIPR) at the mid-point of the accreditation term. The CIPR should address the nursing program's continued compliance with all accreditation standards. The deadline for submitting the progress report to CCNE is December 1, 2013. The Report Review Committee, and then the Board of Commissioners, will review the progress report in the spring of 2014. For more information about CIPRs, please refer to the CCNE *Procedures for Accreditation of Baccalaureate and Graduate Degree Nursing Programs*, available at <http://www.aacn.nche.edu/Accreditation/pdf/Procedures.pdf>.

Please note that the aforementioned CIPR will need to address the CCNE standards that are in effect at the time of submission. In the reminder letter sent approximately 5 months prior to the CIPR due date, CCNE will inform the program of the specific standards to be used and will provide guidance for the preparation of the report.

A copy of the accreditation report that was sent to you earlier, along with your response to it, is being transmitted to the institution's chief executive officer as the Commission's official report to Shenandoah University. We hope that both the results of your self-study process and the accreditation report will be useful to the continued growth and development of the nursing program. A certificate of accreditation is enclosed.

As a reminder, programs are expected to continue to comply with the CCNE standards and procedures throughout the period of accreditation. This includes advising CCNE in the event of any substantive change in your nursing program or of any major organizational changes that may affect the program's administration, scope, or quality. Substantive change notifications must be submitted to CCNE no earlier than 90 days prior to implementation or occurrence of the change, but no

One Dupont Circle, NW
Suite 530
Washington, DC
20036-1120
202-887-6791
fax 202-887-8476
www.aacn.nche.edu

later than 90 after implementation or occurrence of the change. These reporting requirements are discussed further in the *CCNE Procedures*.

We appreciate the many courtesies and the helpfulness extended to the CCNE evaluation team in the spring of 2010. The Commissioners join me in expressing our best wishes as you proceed with tasks important to the future of your nursing program.

Sincerely,



Carol Ledbetter, PhD, FNP, BC, FAAN
Chair, Board of Commissioners

cc: President Tracy Fitzsimmons
CCNE Board of Commissioners
CCNE Accreditation Review Committee
CCNE Evaluation Team

Program Reviewed:

Shenandoah University
OT program (professional entry level master's and combined baccalaureate/master's)
Winchester, Virginia

Material Reviewed:

Progress Report

Action Taken:

Accept the Progress Report

Corrected Areas of Noncompliance:

Area of noncompliance #2 as cited by ACOTE in April 2011 is considered fully corrected.
No further report is required.

Accreditation Status:

ACCREDITATION

Additional Comment:

Because the cited areas of noncompliance have been fully resolved within 1 year of ACOTE's accreditation action, ACOTE further voted to grant a 3-year extension of the accreditation term previously awarded. Therefore, the next on-site evaluation of the occupational therapy program has been moved to the 2020/2021 academic year. A revised ACOTE Certificate of Accreditation that reflects the full 10-year accreditation term has been forwarded to the program director.

ARC-PA

*Accreditation Review Commission on Education
for the Physician Assistant, Inc.*

*Certificate of Accreditation
Awarded to*

**Shenandoah University
Physician Assistant Program
Winchester, VA**

**Awarded: September 2009
Next Review: September 2015**

Patrick C. Auth

Patrick C. Auth, PhD, MS, PA-C
Chair, ARC-PA

John E. McCarty

John E. McCarty
Executive Director, ARC-PA



Accreditation Council for Pharmacy Education

certifies that

SHENANDOAH UNIVERSITY

BERNARD J. DUNN SCHOOL OF PHARMACY

has fulfilled the accreditation requirements set forth in ACPE for the
Professional Degree Program in Pharmacy and is hereby granted

Accreditation Status in good June 20 - 2020.





**SOUTHERN ASSOCIATION OF COLLEGES AND SCHOOLS
COMMISSION ON COLLEGES**

1866 Southern Lane • Decatur, Georgia 30033-4097

Telephone 404/679-4500 Fax 404/679-4558

www.sacscoc.org

June 27, 2011

Dr. Bryon Lee Grigsby
Senior Vice President and
Vice President for Academic Affairs
Shenandoah University
1460 University Drive
Winchester, VA 22601

Dear Dr. Grigsby:

Thank you for your letter of April 28, 2011, providing information which we requested in our letter to you, dated April 20, 2011, concerning the off-campus instructional site where the Pharm.D. degree program will be offered with George Washington University.

The address of the site is as follows:

George Washington University
45085 University Drive
Ashburn, VA 20147

The Doctor of Pharmacy (Pharm.D.) degree program will be offered at the site. The Institution was requested to provide a faculty roster documenting qualifications of faculty members teaching in the program at the site.

The faculty roster as submitted documented appropriate qualifications for faculty members teaching in the program.

We approve the off-campus site at George Washington University where the Doctor of Pharmacy program will be offered, effective fall 2011, and request no further information.

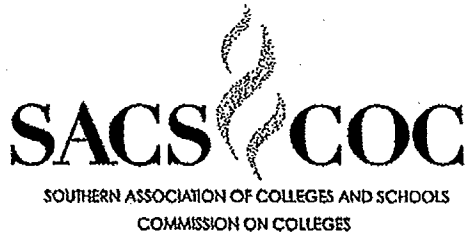
Best regards,

Belle S. Wheelan, Ph.D.

President

BSW/ABC:efk

cc: Dr. Tracy Fitzsimmons, President
Dr. Barry D. Goldstein



August 26, 2013

Dr. Tracy Fitzsimmons
President
Shenandoah University
1460 University Drive
Winchester, VA 22601

Dear Dr. Fitzsimmons:

This letter will verify that Shenandoah University is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award Associate, Bachelor's, Master's, and Doctoral degrees. The Doctor of Physical Therapy program is included in that accreditation, as is the off-campus instructional site:

Northern Virginia Campus
908 Trailview Blvd.
Leesburg, VA 21075

According to Commission policy, adding an approved program to an approved instructional site is not a substantive change. **The addition of the Doctor of Physical Therapy program to the Leesburg site is included in the scope of the institution's accreditation.**

Sincerely,

Belle S. Wheelan, Ph.D.
President

BSW/SLA:efk

cc: Dr. Adrienne Bloss, Vice President for Academic Affairs
Dr. Barry D. Goldberg

Course descriptions from the University's catalog

Division of Physical Therapy

Karen Abraham, Director

333 West Cork Street, Suite 40, (540) 665-5520

Doctor of Physical Therapy (DPT)

Physical Therapy (PT) is a challenging and satisfying profession — one with many career pathways from which to choose. The wide range of clinical settings, the diversity of the patient populations, and the variety of specialty areas provide a vast array of employment and professional growth opportunities for the new graduate. Shenandoah University's entry-level Doctor of Physical Therapy professional degree program prepares students for the challenges of the profession and provides an excellent foundation for further graduate study.

The Division of Physical Therapy Mission

The mission of Shenandoah University's Division of Physical Therapy is to prepare students as doctorally educated physical therapists who are reflective practitioners that provide evidence-based, compassionate and ethical care for the prevention, diagnosis, and treatment of movement dysfunction.

The Division of Physical Therapy Vision

The Division of Physical Therapy will become recognized as a provider of physical therapy education driven by innovation, local and global service, and dedication to professional advancement.

The Physical Therapy Program at Shenandoah University is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE) and is fully accredited until December 2018.

Applicants to the Doctor of Physical Therapy program must have demonstrated success in academics and have a strong background in the sciences. Completion of the bachelor's degree is required. A demonstration of well-developed problem-solving skills, interpersonal skills and commitment to service is necessary. Those applying to the Doctor of Physical Therapy program should be prepared to work closely with other students in the program, make contributions to the learning process of others and contribute to the enrichment of the curriculum and the profession.

The Physical Therapy program is closely affiliated with Valley Health System. This relationship provides extensive clinical opportunities, equipment, space and human resources.

Admission Requirements

The Division of Physical Therapy offers three avenues for admission into the Doctor of Physical Therapy degree program: 1) traditional admissions, 2) articulation agreements, and 3) SU undergraduate Physical Therapy pre-admissions program. Regardless of the route of application, processing for the DPT program is through the Physical Therapy Central Application Service (PTCAS) at www.PTCAS.org. Although these applications are processed through PTCAS, they are held to the same standards as Shenandoah University's

other graduate programs. All offers of admission into the DPT program are determined by the Division of Physical Therapy Admissions Committee.

Although the three admission programs are distinct from one another, there are some common admission requirements. All applicants must:

1. Have a minimum cumulative grade point average (GPA) of a 2.8 on a 4.0 scale in all completed coursework and in all prerequisite coursework.
2. Take the Graduate Record Examination (GRE). For non-native speakers of English, a Test of English as a Foreign Language (TOEFL) must be completed.
3. Submit two letters of reference; one from a licensed practicing physical therapist and one from a college professor.
4. Demonstrate knowledge of the profession by completing a minimum of 40 documented hours (volunteer or paid) of exposure to physical therapy practice under the supervision of a licensed physical therapist.

The primary method for admission into the DPT program is through the traditional admissions program. In addition to the global requirements as listed above, consideration for admission through this process requires applicants to complete a bachelor's degree from an accredited institution prior to matriculation. The bachelor's degree must include the 41 credit hours of prerequisite coursework and applicants must achieve a minimum cumulative GPA of 2.8 on a 4.0 scale for these courses.

A second means of admission into the DPT program is through articulation agreements established by the Division of Physical Therapy with other universities and colleges. This program follows the same admission criteria as noted for the traditional admissions program except for the prerequisite coursework GPA. To qualify for one of the reserved seats, applicants must achieve a minimum cumulative GPA of 3.2 on a 4.0 scale for the 41 credit hours of prerequisite coursework. Applicants who meet the criteria for admission through the Articulation Agreement will be granted priority status for admission to the Division of Physical Therapy. Four to five seats in each incoming class are reserved for students from each participating institution. These universities and colleges include: Bridgewater College, Ferrum College, James Madison University, Shenandoah University and Virginia Tech University. If more than four/five applicants qualify for priority status, the Division of Physical Therapy will rank-order all priority applicants based on consideration of the full set of application materials and the evaluations from the admissions interview. Copies of the articulation agreements can be found at www.su.edu/pt.

In addition to the articulation agreements, the Division of Physical Therapy has established a unique admissions process with the undergraduate Office of Admissions for Shenandoah University (SU Undergraduate Physical Therapy Pre-Admissions Program). The purpose of this program is to allow highly qualified high school students to be pre-admitted into the Doctorate of Physical Therapy program. These students are guaranteed acceptance into the DPT program provided they meet the criteria as outlined below. In order to be admitted to this program as a freshman at Shenandoah University (out of high school) the student must achieve the following:

1. High School Grade Point Average (GPA) of 3.5 or better.
2. Minimum SAT score of 1100.
3. Submission of an undergraduate application for admissions to the Shenandoah University Office of Admissions.
4. Submission of documentation of at least 50 hours of volunteer/observation under the supervision of a licensed, clinical physical therapist.
5. Submission of an essay in response to one of three topics related to physical therapy.

In order to remain in the program and matriculate into the DPT Program at the end of three years of undergraduate study at Shenandoah University, the student must:

1. Successfully complete a minimum of 90 hours of undergraduate coursework with a grade of "C" or above which includes the 41 credit hours of required prerequisite courses. All prerequisite coursework must be completed at Shenandoah University.
2. At the time of application, have a minimum cumulative GPA of 3.4 on a 4.0 scale for the 90 hours of undergraduate coursework and for the 41 credit hours of prerequisite coursework.

Regardless of the admissions process, all science courses must be less than 10 years old at the time of application. Exceptions are made at the discretion of the PT Admissions Committee, if the applicant is able to provide documentation of functional use of the information. Detailed instructions for the admissions process are at www.su.edu/pt or www.ptcas.org.

Criminal Background Checks

All students admitted to the Doctor of Physical Therapy program are required to authorize and submit to a criminal background check. Some students may also be expected to submit to random drug testing as required by clinical practice sites. Non-compliance with the criminal background checks and/or drug testing policies may be cause for dismissal from the program.

Requirements for the Doctor of Physical Therapy Degree

Students must take all courses in the specified order to be retained in the curriculum and receive the DPT degree. All courses must be passed with a grade of "C" or higher and a minimum cumulative GPA of 2.8 must be achieved by the end of each semester. The student who receives a grade of "D" or below will be dismissed from the program. A student who fails to reach the cumulative 2.80 GPA in any semester will be put on academic probation. The 2nd time a student's cumulative GPA falls below a 2.80 they will be dismissed from the program. Students dismissed from the program for academic concerns may petition the faculty for a seat in the next year's class.

Any student who demonstrates inappropriate affective behavior may receive disciplinary action. Conduct or honor violations may result in course failure and/or immediate dismissal from the program.

In addition to policies and procedures of the university as identified in this catalog and the *Student Handbook*, students enrolled in the Doctor of Physical Therapy program are responsible for reading, understanding, and implementing the policies and procedures found in the *Division of Physical Therapy Student Handbook*.

Year 1, Fall

Course	Title	Credit Hours
PT 603	Gross Human Anatomy I	4
PT 607	Examination and Intervention	4
PT 623	Histophysiological Aspects of Movement I	3
PT 643	Evidence-Based Practice: Introduction to Research Design	3
PT 653	Professional Issues I	3
PT 690	Medical Foundations I	1
PT 761	Clinical Conference I	1
	Subtotal	19

Year 1, Spring

Course	Title	Credit Hours
PT 604	Gross Human Anatomy II	4
PT 610	Musculoskeletal System I	3
PT 624	Histophysiological Aspects of Movement II	3
PT 656	Clinical Practicum I	1
PT 672	Functional Neuroanatomy	3
PT 685	Psychosocial Aspects of Physical Therapy	2
PT 694	Medical Foundations II	1
	Subtotal	17

Year 2, Fall

Course	Title	Credit Hours
PT 709	Musculoskeletal System II	3
PT 721	Pathology	3
PT 751	Clinical Practicum II	1
PT 762	Clinical Conference II	1
PT 771	Adult Neurotherapeutics	4
PT 781	Gait Analysis and Biomechanics	3
PT 790	Therapeutic Exercise	1
PT 796	Evidence Based Practice I	1
	Subtotal	17

Year 2, Spring

Course	Title	Credit Hours
PT 703	Pediatric Physical Therapy	4
PT 710	Musculoskeletal System III	4
PT 733	Professional Issues II	1
PT 752	Clinical Practicum III	1
PT 792	Physical Agents	3
PT 797	Evidence Based Practice II	1
PT 896	Medical Foundations III	3
	Subtotal	17

Year 2, Summer

Course	Title	Credit Hours
PT 753	Clinical Internship I	3
	Subtotal	3

Year 3, Fall

Course	Title	Credit Hours
PT 744	Prosthetics and Orthotics	2
PT 821	Cardiovascular and Pulmonary Physical Therapy	3
PT 831	Professional Issues III	2
PT 861	Clinical Conference III	1
PT 881	Advanced Topics	1
PT 882	Comprehensive Examinations	1
PT 893	Evidence Based Practice III	2
	Subtotal	12

Year 3, Spring

Course	Title	Credit Hours
PT 832	Establishing a Physical Therapy Practice/Direct Access	3
PT 854	Clinical Internship II	6
PT 855	Clinical Internship III	6
	Subtotal	15
	Total	100

PHRN 841 Non-Traditional Institutional Clerkship

Students will be responsible for finding an institutional practice site. Students will perform institutional inpatient pharmacist functions while under the supervision of the pharmacist and complete no less than 40 hours of practice. This clerkship will give the student experience in an institutional practice setting. Grade of "S" or "U" only. No credit.

PHYSICAL THERAPY (PT)**PT 603 Gross Human Anatomy I****PT 604 Gross Human Anatomy II**

This two semester course series will provide an in-depth study of human anatomy with an emphasis on normal and pathological form and function as they relate to health care practice. Using a regional approach, emphasis will be placed on the relationship between nervous, muscle, vascular and connective tissue structures and joints. Course material is delivered through a combination of lecture, demonstration, human cadaver dissection, clinical case studies, and radiologic analysis. In addition, surface anatomy laboratory sessions will be utilized to assure that the student has the ability to transfer classroom knowledge to the clinical setting. Upon completion of this course, the student will have acquired the ability to identify, describe and discuss the morphology and function of various body regions. Four credits each.

PT 607 Examination and Intervention

This course is designed to facilitate the student's understanding of the theoretical basis for and the practical application of examination techniques and basic physical therapy intervention skills. This course will guide the student's development of physical therapy evaluation skills via performance and interpretation of specific tests and measures. In addition, the student will develop an understanding of the process by which results of the physical examination are interpreted and an intervention plan of care is developed. This course includes lecture and laboratory time in order to facilitate didactic and psychomotor learning that are essential to the development of sound clinical decision making skills. Upon completion of this course, the student will be able to accurately perform a physical therapy examination, develop a general impression, document goals and design a general plan of care. Four credits

PT 610 Musculoskeletal System I

This course provides an in-depth study of the evaluation and physical management of musculoskeletal dysfunction of the upper extremities of the human body. Students learn to integrate concepts of various approaches to physical therapy management with specific examination and intervention techniques to address both surgical and non-surgical musculoskeletal conditions of the extremities. Various orthopedic manual physical therapy approaches are introduced. The student will also learn to design appropriate therapeutic exercise interventions and use of therapeutic modalities for various musculoskeletal conditions of the extremities. PT 607, Examination and Intervention, is a prerequisite of this course, and students are expected to apply all techniques and principles from the course to the material in PT 610. Three credits.

PT 623 Histophysiological Aspects of Movement I

This course is designed to provide the student with an introduction to Human Histology and Physiology with a major emphasis placed on general cellular physiology, neurophysiology, muscle physiology, epithelium and connective tissue. This provides the basic underpinnings of structure, function, and mechanisms that allow the body to move. Emphasis is on the four basic tissue types and their alterations during the aging process and following immobilization, acute activity, and chronic training. Lecture, laboratory, case study, journal articles, readings and discussion are utilized for teaching purposes. Three credits.

PT 624 Histophysiological Aspects of Movement II

This course is designed to provide the student with an introduction to general organ system human histology and physiology with a major emphasis placed on the cardiovascular, pulmonary, renal, endocrine and gastro-intestinal systems. This will provide the basic underpinnings of structure, function, and mechanisms that allow the body to move. Along with the overview, discussion of the system alterations during the aging process, following prolonged immobilization, with acute activity and following chronic training will be included. Lecture, laboratory, case study, journal articles, readings, and discussion are utilized for teaching purposes. Three credits.

PT 643 Evidence-Based Practice: Introduction to Research Design

This course is designed to provide a thorough analysis of selected research that allows students to develop an understanding of adequate clinical research design, appropriate analytical procedures and the nature of research criticism. Research designs across the spectrum of research will be explored in relation to clinical research for physical therapists. Students will analyze data using SPSS computer software, participate in discussions regarding selected research designs, and critically review selected professional literature. Three credits.

PT 653 Professional Issues I

This course introduces the student to the profession of physical therapy. The professional association, the documents that frame and guide the profession, and basic regulations of the profession are presented. Students will begin to develop their understanding of and ability to teach, speak publicly and participate effectively in groups. Case presentations allow the student direct involvement with patients and other health care providers to bring the field of physical therapy and its place in the health care system to life. The students study medical terminology independently as a part of this course and a computerized test is taken to assure 90 percent competency level. Three credits.

PT 656 Clinical Practicum I**PT 751 Clinical Practicum II****PT 752 Clinical Practicum III**

The focus of these courses is to facilitate the application and integration of didactic information from the classroom setting into clinical practice by expanding clinical problem solving. Each course consists of one day per week clinical experience for a period of 10 weeks. The Clinical Practicum integrates the knowledge, skills and attitudes acquired to date in the classroom and in the labs, to application in the clinical environment. New concepts and skills specific to the clinical experience are incorporated. Under the direct supervision of a practicing physical therapist, the experience is designed to allow the student "hands-on" learning. Additionally, adherence to and a progression of behaviors as identified in *The PT-Specific Generic Abilities* are expected. The three Clinical Practicum experiences should be varied among IP, OP, Rehab, Peds (and other), as clinical contracts allow. Acquisition of experience with "The Guide" and its terminology is expected. One credit per semester.

PT 672 Functional Neuroanatomy

The purpose of this course is to introduce students to how the nervous system functions to control behavior. Based on this understanding, students will later treat individuals with functional limitations due to neurologic damage. This course does not deal with treatment techniques per se, but addresses the structure of the nervous system and how it functions under normal and pathological conditions. Course material is organized by functional system. Within each system, effectors are considered along with input and out connections. Particular attention is paid to the central pathway for each functional system and the clinical aspects of damage to the system. Three credits.

PT 685 Psychosocial Aspects of Physical Therapy Practice I

This course is designed to provide the student with learning experiences focused on psychological and social factors relevant to physical therapy practice. This course emphasizes psychological and social dynamics that occur during patient/client-practitioner interactions. Effective interaction strategies including educational strategies will be discussed and patient-practitioner interactions across the various life stages and cultures is emphasized. Students also examine issues of self-management and self-awareness. Two credits.

PT 690 Medical Foundations I

This course is designed to facilitate the student's ability to practice as a member of an integrated medical team. Students will be introduced to the basic concepts of therapeutic exercise with emphasis on how it applies in an outpatient setting. Students will gain basic knowledge of commonly used medical terminology. Finally, students will learn basic skills to screen for non-musculoskeletal medical conditions. One credit.

PT 694 Medical Foundations II

This course is designed to facilitate the student's understanding of the medical management following surgical procedures and the physical therapists' responsibilities following surgical procedures to include: recognition and interpretation of abnormal lab values, medical emergencies, contraindications to activity, recognition of complications following surgical procedures and physical therapy interventions, including therapeutic exercise, to prevent complications following surgery. This course will provide an overview of those surgeries that most frequently require pre- and post-operative surgical care. Emphasis is placed on classic surgical approaches and

commonly used modifications and the implications for physical therapy care. This course includes lecture and laboratory time in order to facilitate didactic and psychomotor learning that are essential to the development of sound clinical decision making skills. One credit.

PT 703 Pediatric Physical Therapy

This course is designed to provide learning opportunities in the area of early growth and development and pediatric physical therapy. It covers primarily development and neurologic problems of childhood that are addressed by physical therapy. Orthopedic and cardiopulmonary issues not covered in the orthopedic and cardiopulmonary courses will also be addressed. Pharmacological and surgical interventions commonly seen with the pediatric patient will be covered either in the cases, readings or lecture component of this class. Students develop a working knowledge of diagnostic categories, PT problems, evaluation tools and intervention strategies and techniques that are common to pediatric practice. Lecture/discussion, video analysis, labs and patient demonstrations will serve as the primary in-class approaches to learning. Students evaluate and treat a child for six weeks in the treatment labs and are responsible for initial evaluation, problem identification, establishment of defensible goals and treatment programs. Four credits.

PT 709 Musculoskeletal System II

This course provides an in-depth study of the evaluation and physical management of musculoskeletal dysfunction of the lower extremities of the human body. Students learn to integrate concepts of various approaches to physical therapy management with specific examination and intervention techniques to address both surgical and non-surgical musculoskeletal conditions of the extremities. Various orthopedic manual physical therapy approaches are introduced. The students will also learn to design appropriate therapeutic exercise interventions and use of therapeutic modalities for various musculoskeletal conditions of the extremities. PT 607, Examination and Intervention, and PT 610, Musculoskeletal System I, are prerequisites of this course, and students are expected to apply all techniques and principles from those courses to the material in PT 709. Three credits.

PT 710 Musculoskeletal System III

This course provides an in-depth study of the evaluation and physical management of musculoskeletal conditions of the spine and pelvic girdle. Format is a combination of lecture and laboratory experiences with an emphasis on the development of psychomotor skills. Various orthopedic manual physical therapy approaches are covered as are common orthopedic surgical procedures for the spine. Students learn to integrate concepts of various approaches to physical therapy management with specific examination and intervention techniques to address both surgical and non-surgical musculoskeletal conditions. Screening procedures to rule out contributions to clinical presentations from other body systems are included. The principles of worksite injury prevention and industrial rehabilitation are introduced in this course. Attention is given to the application of principles of musculoskeletal system rehabilitation across the lifespan and across clinical settings. Prerequisites: PT 607, PT 610 and PT 709. Four credits.

PT 721 Pathology

This course is designed to acquaint the student to the basic principles in the study of disease. Included is an overview of pathological processes (cell injury, inflammation, neoplasia, etc.), followed by organ system pathology (cardiovascular, respiratory, nervous system, etc.), and multi-system pathology (nutritional, endocrine, wound healing, diabetes, trauma, etc.). A sign/symptom, pathogenesis, pathophysiological approach will be accentuated. Emphasis is also placed on diseases treated by the physical therapist. Pathology serves as an underpinning of mechanisms that lead to impairments, functional limitations and disabilities that are treated in the clinic. Three credits.

PT 733 Professional Issues II

This is the second of three courses of lecture and discussion of ethical, professional and leadership issues encountered in physical therapy practice, administration, billing/reimbursement and management. Within the three course sequence, the student will be introduced to the process necessary for identifying and resolving issues of ethical and/or professional problems in a variety of practice settings. It will include an introduction to the standards of legal and ethical practice and conduct. The legal and ethical impact of confidentiality and accountability will be stressed along with introduction of other current topics of interest to the profession of physical therapy. The student will also be introduced to basic concepts of organization, fiscal policy, reimbursement, and communication issues pertinent to the administration and management of physical therapy service. Prerequisite: PT 653. One credit.

PT 734 Professional Issues II for Dual Major DPT/MSAT

This course is the second of three courses of lecture and discussion of ethical, professional and leadership issues encountered in physical therapy and athletic training practice, administration, billing/reimbursement and management. Within this course, the student will be introduced to the process necessary for identifying and resolving issues of ethical and/or professional problems in a variety of traditional and non-traditional physical therapy and athletic training settings. It will include an introduction of the standards of legal and ethical practice and conduct for dual credentialed physical therapists/athletic trainers. The legal and ethical impact of confidentiality and accountability will be stressed along with the introduction of other current topics of interest to the professions of athletic training and physical therapy. The student will also be introduced to basic concepts of organization, fiscal policy, reimbursement and communication issues pertinent to the administration and management of physical therapy and athletic training services, as well as the promotion of these professional disciplines. Enrollment limited to second year status in the dual degree DPT/MSAT program. Prerequisite: PT 653. One credit.

PT 744 Prosthetics and Orthotics

This course introduces the physical therapy examination and interventions for persons with limb differences and the principles and methods of fabrication of prosthetics and orthotics. The student will become familiar with a variety of spinal and lower extremity orthotics and lower extremity prosthetics. Pathological gait patterns of persons with lower limb amputations are presented, with potential prosthetics and individual causes of deviations analyzed and remedied. Volunteers from the local community will be part of class lab as available. Demonstration of Developing and Advanced Level Generic Abilities is expected. Two credits.

PT 753 Clinical Internship I

The focus of the course is the application and demonstration of problem solving skills in the clinical environment. This first full-time clinical affiliation determines each student's readiness to continue on the program, identifies (potential) problems, and reaffirms career choice. The focus of the course is the application and demonstration of problem solving skills in the clinical environment. Three credits.

PT 761 Clinical Conference I**PT 762 Clinical Conference II****PT 861 Clinical Conference III**

Clinical Conference is designed to facilitate application and integration of didactic information from the classroom into clinical practice by expanding clinical problem solving through clinical cases. A short formal presentation covering selected background information is followed by a presentation of the case research supporting the efficacy of treatment and validity of evaluation tools. Dialogue between students, faculty, and clinicians is encouraged both in large and small group format. Each case is posted in the Blackboard course and archived for student reference and study. One credit.

PT 771 Adult Neurotherapeutics

This course, together with Functional Neuroanatomy (PT 672) and the related clinical education experiences, will prepare the entry-level practitioner to evaluate and treat adult clients with movement dysfunction due to neurologic damage. The ability to evaluate and treat this patient population is based on understanding in three content areas: 1) theoretical models of how human movement is controlled under normal and pathological conditions; 2) knowledge of the etiology, clinical presentation, and natural history of recovery from neurological damage; and 3) techniques to examine and intervene in the most common movement impairments and functional limitations due to neurologic damage. This course also provides extensive laboratory experience examining and intervening with real and simulated patients with movement dysfunction due to neurologic damage. Four credits.

PT 781 Gait Analysis and Biomechanics

This is an introductory course in Gait Analysis and Biomechanics. The purpose of this course is to acquaint the student with the force motion relationship within the musculoskeletal system and the various techniques used to understand these relationships. Special lab activities will be utilized to enhance understanding of the gait cycle and biomechanics in sports and exercise. Course format will utilize an active learning approach which will include laboratory and self-directed learning activities. Students will use resources in the classroom, clinical/professional community and library in addition to the texts and syllabus to meet course requirements. Three credits.

PT 790 Therapeutic Exercise

This course covers the principles of therapeutic exercise prescription for the physical therapy patient/client. Theory and practice of the following exercise domains are covered including stretching, resisted exercise, plyometrics, endurance training and balance and proprioceptive training. Appropriate exercise dosage, including frequency, intensity, volume and duration will be covered in each domain. One credit.

PT 792 Physical Agents

This course covers the physical modalities, electrodiagnostic techniques, hydrotherapy, massage, myofascial release, trigger point therapy, and acupuncture/acustimulation. The modalities include thermal modalities, traction, continuous passive ROM, electrical stimulation, biofeedback, and electrodiagnostic techniques. The indications, contraindications, physiologic basis for therapeutic effect, and known efficacy are discussed in the lecture/discussion component. Students will experience the effect of each modality and develop psychomotor skills in the application of each modality during the laboratory portion of the course. Therapeutic implications of findings derived from electrodiagnostic testing are explored through the use of case studies and clinical examples. Students will develop skills in integrating the use of physical modalities into clinical practice through the use of case studies, class discussion, and computer-based interactive programs. Three credits.

PT 796 Evidence Based Practice I

This is the first of a three-course sequence for the culminating research experience in the DPT program. Successful completion of PT 643 is necessary prior to enrolling in this course. In this course, students will develop a research proposal and successfully complete all appropriate applications for the Institutional Review Board. This endeavor is the first component of the endeavor that will be continued in PT 797 and PT 893 in which the project is formally completed and presented. This proposal will be done under the advisement of faculty with expertise in the research and content areas. Prerequisite: PT 643. One credit.

PT 797 Evidence Based Practice II

This is the second of a three-course sequence for the culminating research experience in the DPT program. In this course, students will complete data collection for proposed research projects, perform appropriate literature searched for primary and secondary analyses, obtain relevant literature, and complete the initial portions of a written manuscript through an iterative process with peers, the instructor and any clinical or faculty advisors involved in the project. This endeavor is the continuation of the endeavor begun in PT 796 in which the project was formally developed and the IRB process successfully completed. Prerequisites: PT 643 and PT 796. One credit.

PT 821 Cardiovascular and Pulmonary Physical Therapy

This course is designed to provide the student with a general foundation in examination, evaluation, diagnosis, prognosis, interventions, and outcomes for persons with cardiovascular or pulmonary disorders. Application of specific tests and measures, their reliability and validity, and efficacy of treatment interventions will be covered. Clinical reasoning and decisions are fostered through multiple case studies. Cardiovascular and pulmonary risk factor reduction and wellness/health promotion will also be covered. Three credits.

PT 831 Professional Issues III

This is the third of three courses of lecture and discussion of ethical and professional issues encountered in medicine and physical therapy. Legal and ethical issues covered in the second course will be used as a basis for many of the issues covered in this course. In this course, the student will be introduced to the business and managerial aspects of physical therapy practice, and these issues will be further explored in PT 832. Issues related to career choices and job acquisition will also be addressed in this course. Two credits.

PT 832 Establishing a Physical Therapy Practice/Direct Access

This course will introduce the student to the fundamentals of establishing a physical therapy practice. It will include small business basics, understanding business structures, understanding the reimbursement issues facing PTs in private practice, analyzing a financial plan, developing policies and procedures for the practice and understanding risk management. The necessary philosophy of the expanded role as a diagnostician and the marketing strategies required to promote and advocate for the autonomous model of care will be discussed. The peer reviewed and published clinical competencies that define primary contact physical therapy and how these skills will help to provide health care consumers safe and effective management of neuromusculoskeletal impairments and functional limitations will be presented. Three credits.

PT 854 Clinical Internship II**PT 855 Clinical Internship III**

The emphasis of these learning experiences is to progress to a level of functioning as an entry-level clinician. The amount of assistance required by the clinical preceptor will gradually decrease as the student progresses within each clinical internship. Clinical internships are expected to be across a variety of settings with the expectation of entry-level competence at the completion of each internship. Six credits each.

PT 881 Advanced Topics

This course is designed to offer the student a variety of opportunities to expand their evaluation and treatment skills. Students are required to integrate advanced problem-solving skills with a wide range of treatment approaches. One credit.

PT 882 Comprehensive Examination

This is a preparatory course to help the student integrate the entire curriculum in preparation for practice and prepare them for the comprehensive oral and written examinations. The students will be given weekly cases for discussion and practice. The course concludes with a comprehensive oral and written examination intended to identify the students' preparedness to enter their full time clinical rotations. Both parts of this examination must be passed to proceed with full time clinical affiliations. Specific testing details are found on Blackboard. This course is Pass/Fail only. One credit.

PT 890 Medical Foundations III for Dual Major MSAT/DPT

This course is designed as three mini-courses for second year dual major (athletic training/physical therapy) students. The integumentary disorders mini-course is designed to acquaint the student to management of wounds. A general foundation in examination, evaluation, diagnosis, prognosis, interventions and outcomes for persons with various types of wounds will be provided. Application of specific tests and measures, their reliability and validity, and efficacy of treatment interventions in addition to wound risk factor reduction will be presented. Clinical reasoning and decisions will be fostered through case studies. The second mini-course covers pharmacology and is designed to explain the basics of pharmacotherapeutics and surveys those medications most commonly prescribed for patients seen by the physical therapist and/or athletic trainer. During this mini-course, the dual degree student will also learn the governing regulations relevant to treating the injured or ill athlete or active person. In the third mini-course, students will learn more advanced skills to screen for non-musculoskeletal conditions. Enrollment is limited to second year students enrolled in the dual degree DPT/MSAT program. Three credits.

PT 893 Evidence Based Practice III

This course is the culminating research experience in the DPT program. In this course, students will complete a written manuscript through an iterative process with peers, the instructor and any clinical or faculty advisors involved in the project. This endeavor is the continuation of the endeavor begun in PT 796 and PT 797 in which the project was formally developed, data collected and the initial portions of the manuscript were completed. Prerequisites: PT 796 and PT 797. Two credits.

PT 896 Medical Foundations III

This course is designed as three mini-courses. The Integumentary Disorders mini-course is designed to acquaint the student to management of wounds. A general foundation in examination, evaluation, diagnosis, prognosis, interventions and outcomes for persons with various types of wounds will be provided. Application of specific tests and measures, their reliability and validity, and efficacy of treatment interventions in addition to wound risk factor reduction will be presented. Clinical reasoning and decisions will be fostered through case studies. The second mini-course covers pharmacology and is designed to explain the basics of pharmacotherapeutics and surveys those medications most commonly prescribed for patients seen by the physical therapist. In the third mini-course, students will learn more advanced skills to screen for non-musculoskeletal medical conditions. Three credits.

Division of Occupational Therapy

Dr. Leslie Davidson, Director
333 West Cork Street, Fifth Floor, (540) 665-5540

Master of Science in Occupational Therapy

The mission of Shenandoah University's Division of Occupational Therapy is to prepare students for a future in the field of occupational therapy in three primary ways. We prepare students to passionately discover new knowledge, which requires them to be self-reflective and lifelong learners. We prepare them to be critically thinking practitioners, serving clients who live in diverse local and global communities. We transform them into professionals who understand the importance of ethics, leadership and service.

Occupational Therapy Program

The Occupational Therapy Program is fully accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, Suite 200, Bethesda, MD 20814-3449. AOTA's phone number is (301) 652-AOTA. Graduates are eligible to apply for the NBCOT Certification Examination for Occupational Therapist Registered OTR®. Graduates must answer each of the following questions on the examination application:

- Have you ever been charged with or convicted of a felony?
- Have you ever had any professional license, registration or certification revoked, suspended or subject to probationary conditions by a regulatory authority or certification board?
- Have you ever been found by any court, administrative or disciplinary proceeding to have committed negligence, malpractice, recklessness or willful or intentional misconduct, which resulted in harm to another?

If the answer to any of these questions is "yes," the candidate must submit documentation to NBCOT's Regulatory Affairs Department, 12 South Summit Avenue, Suite 100, Gaithersburg, MD 20877-4150; (301) 990-7979, which will determine eligibility. Upon passing the examination, occupational therapists are able to use the trademark OTR.

Graduation from an accredited professional program, passing the NBCOT Certification Examination and freedom from felonies and other legal infractions are the qualifications for licensure or registration to practice in most states. Students must check with specific states for laws regarding the right to practice.

Admission Requirements

The Master of Science in Occupational Therapy offers a graduate program delivered in a hybrid format, meaning much of the content is delivered online. Students come to campus one day per week for the face-to-face portion of their courses and all fieldwork experiences are completed on non-campus days and during normal working hours. Additionally, students are expected to engage in hands-on experiences in their home communities as directed by faculty. The learning model requires students to think critically and act professionally in independent, interpersonal and community-based problem-solving experiences.

Admission requirements include: a 3.0 grade point average, a bachelor's degree, completion of prerequisite courses with minimum grade of "C;" a writing sample; two references from two of these three people: a licensed occupational therapist OTR (not an assistant), a professor or an employer; and a minimum score of 143 on the quantitative section of the Graduate Record Examination. In addition, applicants must supply documented evidence of 40 hours of observation under qualified occupational therapists in practice. For additional information, check the website at www.su.edu/ot.

Criminal Background Checks

Prior to beginning health professional courses, a student is required to authorize and submit to a criminal background check, including sex offenses and crimes against minors and fingerprinting. Some students may also be expected to submit to random drug testing required by clinical practice sites. Non-compliance with the criminal background checks and/or drug testing policies may be cause for dismissal from the program. See Academic Policies section for details.

Degree Requirements

The Master of Science degree in Occupational Therapy (MSOT) requires a minimum of 75 credit hours of occupational therapy courses for graduation. Students must begin coursework in the fall semester of the year they gained acceptance into the program. Full-time students must progress through the program within four years including fieldwork. Progression is based on the following: satisfactory completion of all course prerequisites before beginning coursework each semester; completion of all coursework with grades of "C" or better; maintenance of a 3.0 cumulative grade-point average (GPA); satisfactory evaluation on Professional Development Plans in each semester of the curriculum; payment of all university tuition and fees; maintenance of health, clinical safety and security requirements, including CPR, physical examinations and criminal background checks.

Students who receive grades of "D" or "F" in a course are not permitted to take any new courses in the program and are placed on academic probation until all required work has been successfully completed. Courses may be repeated only once. Failure to successfully complete the designated requirements within two semesters results in termination from the program. Students who receive grades of "D" or "F" in more than two courses are dismissed from the program.

OT 628 Basic Level One Fieldwork and OT 638 Bridge Level One Fieldwork experiences are completed on non-campus days and during normal working hours. OT 640 and OT 641, Level Two Fieldwork, is a full-time experience completed during normal working days and hours. Either OT 640 or OT 641, Level Two Fieldwork, may be repeated once. Students who fail Level Two Fieldwork more than one time are dismissed from the program. All admitted students are required to review the *SUDOT Fieldwork Handbook* regarding specific policies.

In addition to policies and procedures of the university as identified in this catalog and the *Student Handbook*, occupational therapy students are responsible for reading, understanding, and implementing the policies and procedures found in the *Division of Occupational Therapy Student Handbook*.

Full-time Course Sequence**Semester One (Fall)**

Course	Title	Credit Hours
OT 522	Foundations of Occupational Therapy	4
OT 523	Therapeutic Occupation	2
OT 524	Occupation and Movement	4
OT 525*	Fundamentals of Scholarly Inquiry	3
OT 526	Foundational Case Groups I	1
OT 527	Community Application with Individuals	2
	Subtotal	16

Semester Two (Spring)

Course	Title	Credit Hours
OT 531*	Scholarly Inquiry: Quantitative Design and Analysis	3
OT 532	Neuro-Occupation	5
OT 534	Analysis of Health and Occupation	2
OT 535	Management and Systems in Occupational Therapy Settings	3
OT 536	Foundational Case Groups II	1
OT 537	Community Application in Systems	2
	Subtotal	16

Semester Three (Fall)

Course	Title	Credit Hours
OT 621*	Scholarly Inquiry: Development and Evaluation of Therapeutic Programs	2
OT 623	Occupational Therapy in Biomechanical and Neurological Practice	4
OT 624	Occupational Therapy in Mental Health Practice	3
OT 625	Occupational Performance and Participation: Children	4
OT 626	Basic Case Groups	1
OT 628**	Basic Level One Fieldwork	1
	Subtotal	15

Semester Four (Spring)

Course	Title	Credit Hours
OT 630*	Scholarly Inquiry: Application	3
OT 631	Specialization: Occupational Therapy with Children	3
OT 635	Specialization: Occupational Therapy for Adults	3
OT 633	Environmental Interventions	3
OT 634	Policy and Advocacy	3
OT 638**	Bridge Level One Fieldwork	1
	Subtotal	16

Semester Five (Summer)

June Through November (continues right after Semester Four):

Course	Title	Credit Hours
OT 640	Level Two Fieldwork	6
OT 641	Level Two Fieldwork	6
	Subtotal	12

December: Students participate in one week of reflection and integration of learning before graduation in mid-December. A portion of that time will be on-campus.

Total	75
-------	----

**Each scholarly inquiry course leads to the completion of a capstone project (formerly known as a thesis). A capstone project is a research proposal designed to test the effectiveness of an occupational therapy intervention. The SU faculty is committed to advancing the profession by teaching students to develop and test their therapeutic programs. It is believed that the important task of validating practice requires greater attention to program development, evaluation and testing.*

***All Level One Fieldwork experiences are completed on non-campus days and during normal working hours.*

PMH 686 Child and Adolescent Psychiatric Mental-Health Nursing Theory

The course is designed to assist the student in developing knowledge, skills, values, meanings and experiences associated with positively influencing the lived health experience of children and adolescents experiencing concurrent mental illness and/or cognitive decline. Health promotion strategies, assessment measures, through individual, family and group therapy modalities with this population will be discussed. *The Diagnostics & Statistical Manual of Mental Disorders* criteria will be incorporated. Three credits.

PMHL 692 Elective Practicum in Psychiatric Mental-Health Nursing

This course allows the student to apply knowledge, skills, values, meanings and experiences to positively influence the lived experience of a population of their choice with common psychiatric mental health conditions. Individual, family and group psychiatric therapies will be applied across the lifespan in populations such as geriatric, adolescent and child, or persons with substance abuse problems in both inpatient and outpatient settings. Two credits.

PMH 695 Advanced Nurse Practitioner Practicum in Psychiatric Mental-Health Nursing

The didactic and clinical components of this course are designed to provide the psychiatric mental-health nurse practitioner (PMHNP) with knowledge, skills, values, meanings and experiences beyond the MSN prepared psychiatric mental-health clinical nurse specialist role in relation to differential diagnosis and psychotropic medication management (prescriptive authority). The PMHNP role includes assessment, health promotion, diagnosis, planning, medication management and ongoing evaluation of psychiatric mental-health clients across the lifespan in a variety of settings to include primary care sites. Pharmacotherapy principles and psychosocial factors that influence patients' compliance with, and response to, drug therapy are addressed. The practicum applies differential diagnosis and medication management principles to acute and chronic psychiatric clients and fulfills the post-graduate psychiatric clinical nurse specialist clinical requirement for the American Nurses Credentialing Certification PMHNP exam. Concurrent enrollment in PMHL 695 is required. Prerequisites: N 550 and NPLB 580. Four credits.

OCCUPATIONAL THERAPY (OT)**OT 522 Foundations of Occupational Therapy**

This course introduces students to the profession of occupational therapy through the discussion of its history, philosophy, values, methods and broad theories of occupational performance. Students learn to describe therapists' roles with different populations in a variety of settings, use professional terminology and analyze occupational development across the life span. Four credits.

OT 523 Therapeutic Occupation

This course covers the information and methods of using occupations as therapeutic modalities. Using a hands-on approach, students learn how to use their observation and interview skills to collect information from clients. They also learn how to apply principles and methods of activity analysis and synthesis to design customized plans intended to help clients perform occupations when they cannot be performed in the familiar way. Students apply theoretical principles and research-based methods to instruct others effectively. Two credits.

OT 524 Occupation and Movement

This course addresses the basic anatomical, kinesiological and physiological structures and how they influence movement and occupational performance through the use of the cadaver lab, skills lab, and lecture. Basic concepts of biomechanics are introduced as well as how environmental/contextual factors may influence activity and motion. Throughout the course, an emphasis is placed on how human structure supports human function across environmental contexts and activity. In addition to the foundational elements of movement and how they influence occupation, students also examine how various conditions (orthopedic and medical) may impact movement and ultimately participation in a variety of occupations. Four credits.

OT 525 Fundamentals of Scholarly Inquiry

This course introduces basic concepts of clinical reasoning, evidence-based practice and critical analysis. It gives students an introduction to interview and observation through the lens of qualitative research methods. The course is presented through in-class lecture and discussion, practical exercises and readings. Corequisite: OT 523. Three credits.

OT 526 Foundational Case Groups I

This small group, problem-based learning course teaches students to analyze cases that draw on content from multiple foundation unit courses. The overarching focus is to develop critical thinking skills, informatics skills and professional behavior appropriate for a small group setting. One credit.

OT 527 Community Application with Individuals

Students with the help of site facilitators and faculty members will help an individual explore their occupational performance. In order to accomplish this task, students will integrate content and skills gained through courses in the first semester of the SUDOT program. Each student will utilize appropriate skills such as observation, interviewing, biomechanical evaluation (active range of motion and strength) and activity analysis. Additionally, students will demonstrate an understanding of the role of occupational therapy by designing client-centered, occupation-based activities. Two credits.

OT 531 Scholarly Inquiry: Quantitative Design and Analysis

This course focuses on the development of skills to validate practice, evaluate evidence and inform clinical decisions. This course introduces designs in the experimental (or quantitative) tradition and statistical analysis that are typical in OT research. Students are introduced to statistical software. Prerequisite: OT 525. Three credits.

OT 532 Neuro-Occupation

Neuro-occupation emphasizes the dynamic interactions between the central nervous system and occupation. Upon completion of this course, students have an understanding of the neuro-anatomical, neuro-chemical and neuro-physiological concepts that influence daily performance areas. Through clinical cases, review of research, lecture, and clinical application sessions, students learn about neurological conditions and the interplay between neurological functions, occupational performance and meaningfulness. Prerequisite: OT 524. Five credits.

OT 534 Analysis of Health and Occupation

This course is based on the philosophy and research about the relationship between occupations and health. Students discuss theories and models that link occupation to individual, public health, and health changes. The impact of various conditions on occupational performance is discussed. Prerequisite: OT 522. Two credits.

OT 535 Management and Systems in Occupational Therapy Settings

This course is designed to introduce, examine, and develop skills necessary for health care management and administration. An emphasis is placed on concepts of systems management and leadership as they relate to the management of services. In addition, the role of the occupational therapy supervisor/manager this course emphasizes leadership, communication, budgeting, program development and evaluation, staffing, reimbursement, quality care, policy and procedure development, cost containment, current trends in health care, productivity, entrepreneurship and professional ethics. Prerequisites: OT 522, OT 524 and OT 527. Three credits.

OT 536 Foundational Case Groups II

This small group, problem-based learning course teaches students to analyze cases drawing on content from multiple foundation unit courses. The overarching focus is to develop clinical reasoning skills which include an understanding of the links between occupational performance, disease/disability, health/wellness, and the systems in which individuals function. Prerequisite: OT 526. One credit.

OT 537 Community Application in Systems

Community application sessions integrate semester content and skills through on-site sessions in community agencies. Students and faculty evaluate systems and community-based programs that meet the diverse needs of individuals with various medical conditions. A major focus of learning and programs is the governmental, community and agency systems that impact service to individuals and groups. This course integrates content through reports and projects for the agencies that are considered capstone projects. Prerequisite: OT 527. Corequisite: OT 536. Two credits.

OT 621 Scholarly Inquiry: Development and Evaluation of Therapeutic Programs

The course emphasizes program development and program evaluation in OT. Students work with a faculty mentor to establish the components of a specialized occupational therapy program with an evaluation component for a specified client population. Content is presented through in-class lecture and discussion and practical exercises in order to develop the student's clinical reasoning, ability to critique scholarly literature and understand scientific methods. Prerequisite: OT 531. Two credits.

OT 623 Occupational Therapy in Biomechanical and Neurological Practice

This is a practice-oriented course designed to develop competencies in occupational therapy evaluation and intervention with an emphasis on adult clients with a variety of neurological, general medical and orthopedic disorders. Students explore the intervention process while utilizing a variety of models of practice. Students select and administer standardized and non-standardized assessment tools and use information for the purpose of treatment planning and determining the effectiveness of intervention strategies adopted. Students become familiar with the application of various models of practice and explore a variety of intervention strategies and activities for both the remediation of and adaptation to occupational performance deficits. In addition, the course incorporates documentation, family and caregiver support and education, environmental modifications, discharge planning and working as a member of a multidisciplinary team. Prerequisites: OT 523, OT 524 and OT 532. Corequisite: OT 624. Four credits.

OT 624 Occupational Therapy in Mental Health Practice

This is a practice-oriented course designed to develop student competence with implementation of the occupational therapy process for clients with a variety of mental health conditions across the lifespan. Applications to assessment and treatment within various psychiatric treatment settings are emphasized while utilizing both occupation and non-occupation-based frameworks to guide clinical reasoning, including Person-Environment-Occupation (PEO) and Recovery models. Individual and group programming modalities will be understood in the context of the lived experience of individuals with mental illness and their families to prepare students for delivery of effective client and family-centered care in traditional and non-traditional behavioral health environments. Prerequisites: OT 523, OT 524, and OT 532. Corequisite: OT 623. Three credits.

OT 625 Occupational Performance and Participation: Children

This practice-oriented course provides students with an overview of occupational therapy in the area of pediatrics. Emphasis is placed on the child and family in the context of environment and cultures as well as the effect of disability on occupational performance. Evaluation, intervention planning and intervention techniques from a variety of theoretical perspectives are explored. Prerequisites: OT 523, OT 524 and OT 532. Four credits.

OT 626 Basic Case Groups

This small group, problem-based learning course teaches students to analyze cases drawing on content from multiple basic unit courses. The overarching focus is to further develop clinical reasoning skills by applying evidence-based evaluation, intervention and documentation skills to complex cases. Prerequisite: OT 536. One credit.

OT 628 Basic Level One Fieldwork

This is the first in a series of four fieldwork experiences where students are assigned to a qualified professional for a minimum of 48 hours in a traditional or emerging practice setting. The student will develop comfort level with, and understanding of, the needs of clients, and practice foundational skills taught in the previous two semesters. Students will demonstrate professional behaviors, implement personally designed learning objectives and tasks, and actively participate in service provision with clients commensurate with their learning to date. Prerequisites: OT 523, OT 524 and OT 532. One credit.

OT 630 Scholarly Inquiry: Application

This is the program capstone course designed to give students the opportunity to gather evidence for occupational therapy methods. Content is presented through in-class lecture, discussion and practical exercises. The course focuses on the development of projects related to evidence-based practice. Prerequisite: OT 621. Three credits.

OT 631 Specialization: Occupational Therapy with Children

This is an advanced pediatric course about occupational therapy practice in specific practice areas. Advanced theories, evaluation, and intervention methods are covered. Students critique research and evidence for occupational therapy effectiveness in pediatrics. To integrate theory, evaluation, planning and implementation, students work with a child and family in the community as their final project. Prerequisite: OT 625. Three credits.

OT 633 Environmental Interventions

This course instructs students in the assessment and application of environmental interventions. Students learn about theories, funding and legislation, documentation and research evidence. Students learn how to collaborate with clients to select and modify environmental interventions, advocate for funding and policies supporting environmental interventions and educate clients on their use to improve their occupational performance. Prerequisites: OT 523, OT 524, OT 532, OT 623 and OT 624. Three credits.

OT 634 Policy and Advocacy

This course gives students the skills necessary to analyze federal, state, and organizational policies. Major policies that impact occupational therapy and other health professions are analyzed. Advocacy, both on behalf of clients and the profession, is explored. The course is presented in the context of the major systems with which occupational therapists interact. Prerequisites: OT 623, OT 624 and OT 625. Three credits.

OT 635 Specialization: Occupational Therapy for Adults

This course emphasizes evidence based, in-depth strategies for occupational therapy assessment and treatment in special topic areas. Content includes, but is not limited to, the theory and application of physical agent modalities, advanced splinting techniques, the role of OT with individuals with low vision, and emerging practice areas such as tele-rehabilitation, adult well-elderly and community based services. Additionally, content emphasizes occupational therapy practice with the aging population. Prerequisites: OT 623 and OT 624. Three credits.

OT 638 Bridge Level One Fieldwork

This is the second in a series of fieldwork experiences where students are assigned to a qualified professional for a minimum of 48 hours in a traditional or emerging practice setting. This course involves practicing basic therapeutic skills learned in the previous semester. Students will build on their previous fieldwork by designing more complex personal learning objectives and tasks, and being more actively involved in service provision with clients commensurate with their learning to date. Prerequisites: OT 523, OT 524 and OT 532. One credit.

OT 640 Level Two Fieldwork**OT 641**

The purpose of Level II fieldwork is to provide occupational therapy students with the opportunity to apply the academic knowledge and skills learned in the classroom to selected clinical settings under the supervision of a practicing clinician. Placements are selected to expose students to a variety of client ages and diagnoses and clinical settings, and provide experiences that promote clinical reasoning, professionalism and reflective, ethical practice. The goal of these placements is to produce competent, entry-level, generalist therapists. The American Occupational Therapy Association requires that Level II fieldwork be the equivalent of 24 full-time weeks and each of these courses involves 12 weeks of full-time supervised clinical practice. After completion of both fieldwork courses, students return to campus for sessions to prepare them for the registration exam and facilitate their transition to professional life. These two fieldwork courses may be taken in any order. Prerequisites: OT 628 and OT 638. Six credits each course.

OT 643 Elective Level Two Fieldwork

This course gives students the opportunity to experience a unique area of clinical occupational therapy. Same description and prerequisites as OT 640 and OT 641. Four to six credits.

OT 650 Independent Study in Occupational Therapy

In-depth exploration of an occupational therapy topic with a faculty advisor. One to three credits.

Division of Physician Assistant Studies

Rachel A. Carlson, Director and Associate Professor
Medical Office Building II, Suite 430, (540) 542-6208, pa@su.edu

Master of Science in Physician Assistant Studies

Physician Assistants (PAs) are health care professionals who practice as part of a team with a physician. Physician assistants exercise autonomy in decision-making and provide a wide range of diagnostic and therapeutic services with physician supervision. The role of the physician assistant includes provision of primary and specialty care in medical and surgical practices located in rural, urban and suburban areas. Physician assistant practice is patient-care centered but may include education, research and administrative duties. (Adapted from AAPA, 2013)

The Shenandoah University Physician Assistant Program is a graduate entry-level professional course of study enabling individuals who hold baccalaureate degrees to become physician assistants. The program is designed to prepare graduates for primary care practice with emphasis on service to medically underserved populations and the team approach to the delivery of health care. The program integrates graduate-level critical thinking and analysis, problem solving, scientific inquiry, self-directed learning and the effective use of modern technology for professional practice that includes elements of research, leadership, education and continued enhancement of the physician assistant profession.

The purpose of the Physician Assistant Program is to graduate competent professionals who are well prepared for the demands of modern professional practice in a rapidly changing health care environment. The curriculum goals are based upon the AAPA/PAEA/NCCPA/ARC-PA "Competencies for the Physician Assistant" document, standards for educational programs contained in the "Accreditation Standards for Physician Assistant Education," the Program's Mission Statement, and the needs of the PA profession. In the PA program curriculum, knowledge, skills and attitudes are considered to be critical elements of professional practice and are addressed in the following curricular goals.

The graduate of the SU Physician Assistant program will demonstrate the following:

1. Entry-level proficiencies necessary for high-quality, cost-effective practice as a primary care physician assistant in a dynamic health care delivery system.
2. An understanding of the principles of scientific inquiry and research design as well as the ability to apply these principles to critically read and interpret the literature, leading to enhanced delivery of health care.
3. An ability to incorporate the basic principles of education and teaching-learning into programs that benefit the patient, the patient's family and the community.
4. Attitudes and skills that exemplify a commitment to personal growth and development and to the growth and development of the profession.
5. Attitudes and skills that demonstrate sensitivity to cultural and individual differences.
6. An ability to assume a leadership role in professional activities and organizations that advance the physician assistant profession.

7. A team and community-oriented approach to the delivery of health care utilizing appropriate modern technologies for the benefit of the patient, the patient's family and the community.

Mission

The mission of the Shenandoah University Division of Physician Assistant Studies is to provide a comprehensive educational program in a collaborative and supportive environment to develop highly skilled, well-educated, compassionate primary care-oriented physician assistants who are capable of providing high-quality, patient-centered health care in a variety of settings.

Core Values

We believe physician assistants should:

1. Practice competently, ethically and cost-effectively.
2. Serve where needed, both domestically and globally.
3. Demonstrate sensitivity to cultural and individual differences.
4. Commit to continued personal and professional growth through lifelong learning.
5. Contribute to the profession and humankind through leadership, teaching and active scholarship.
6. Promote wellness and personal responsibility for maintaining health.
7. Advocate for a team approach to health care delivery.
8. Promote and uphold the physician assistant profession and its ideals.
9. Enrich patients and communities through service and a broad-based humanistic approach to the practice of their profession.

Curriculum Design

The curriculum design, offered in didactic and experiential components, is based upon the concepts of adult-centered learning and professional education, which focus on mastery of knowledge, skills and attitudes required by the graduate to practice effectively as a physician assistant. The didactic curriculum offers multiple modalities for learning, which include self-directed study, recitation, lecture, integrated clinical cases and laboratory experiences. These modalities assist students in developing the necessary skills to be self-directed life-long learners and effectively apply what they learn in the clinical setting. The clinical curriculum provides core primary care and other learning experiences where students apply knowledge and skills in patient care settings under the supervision and mentoring by licensed health care providers.

The Physician Assistant program is offered on a full-time basis only. The length of the program is eight semesters (30 months). The delivery model is designed to prepare students for a rapidly changing health care environment where simple memorization of facts and figures is insufficient for effective clinical practice. Delivery of content includes face-to-face, asynchronous online, and video-conferencing. Learning is accomplished through independent study and preparation, lecture and discussions, small-group case-based

exercises, and practical application. Interprofessional learning opportunities are integrated throughout the curriculum. As adult learners, it is expected that students will actively engage in independent study, inquiry and clinical rotations outside the classroom to augment learning and to maximize effectiveness of classroom and laboratory contact time.

Since the PA program will use computer technology in the delivery of the curriculum, all PA students must be computer literate. The Shenandoah University PA program has implemented a technology program, which provides a laptop computer, a mobile learning device, and technology support. Participation in this program is mandatory.

Students are expected to adjust their non-curricular demands in order to complete the degree requirements. Employment is not recommended while attending the Physician Assistant program.

Entrance Requirements

The Physician Assistant Program Admissions Committee determines admission to the Physician Assistant Program. Entrance requirements include: a bachelor's degree, a 3.0 grade point average, submission of academic transcripts, submission of GRE scores, three references and completion of certain prerequisite courses, which are listed in detail on the program's website (www.physician-assistant.su.edu). Health care experience is not required but highly suggested and considered by the SU PA admissions committee. Qualified candidates are invited for an interview with the Admissions Committee. Due to the competitive nature of admission to the program and the limited number of seats available in each class, just meeting minimal requirements is usually insufficient to qualify for an interview or admission to the program.

The Physician Assistant Program admits students for the summer semester only. Early application is encouraged and applications are reviewed as they are deemed complete. Visit www.physician-assistant.su.edu for the application deadline. Physician Assistant Program application materials are updated annually. Candidates are urged to ensure that they are using the current application materials for the year in which they are applying. Specific information regarding admission and other requirements, acceptance, transfer credits, technical standards, and credit for experiential learning can be obtained by contacting the Shenandoah University Office of Admissions and requesting the *Admission Guidelines Booklet* or via the program's website. Please note: Shenandoah University's Physician Assistant Program participates in the Central Application Service for Physician Assistants (CASPA). All applications must be submitted through this service at www.caspaonline.org.

Transfer and Credit for Experiential Learning

The Division of PA Studies will consider requests for up to 12 semester hours (or equivalent quarter hours) of transfer credit into the curriculum. In order to be considered, courses must have been successfully completed within the past three years with a grade of "B" or better in a graduate-level program at an accredited institution of higher learning. Courses will be considered for transfer only if they are directly applicable to the established physician assistant program curriculum, as determined by the faculty after thorough review of all appropriate documents (application, transcripts, recommendations and personal request letter).

If the request for transfer is from another physician assistant educational program, it must be from another graduate-level program in which the student is in good standing, and with

the specific recommendation of the program director, dean or other appropriate official. The faculty will determine satisfaction of program course prerequisites for transfer students from other PA programs on a case-by-case basis. Transfer candidates must fulfill the Shenandoah University prerequisites prior to matriculation. Candidates not accepted as a transfer student may apply to the program during a regular admission cycle.

Degree Requirements

Physician Assistant program courses listed below may not be taken out of sequence. A passing grade of "C" or better in each course and maintenance of a 3.0 grade point average is required for satisfactory progression and graduation. Policies regarding academic standing and graduation are contained in the graduate catalog and the *Physician Assistant Program Student Handbook* available at www.physician-assistant.su.edu.

Requirements for the Master of Science in Physician Assistant Studies Degree

Course	Title	Credit Hours
Summer I		
PA 504	Medical Physiology and Genetics	3
PA 507	Neuroscience	1
	Subtotal	4
Fall I		
PA 511	Introduction to Physician Assistant Profession	1
PA 508	Anatomy for Physician Assistants I	4
PA 515	Medical Interview and Physical Assessment I	2
PAL 515	Medical Interview and Physical Assessment Lab I	1
PA 521	Introduction to Clinical Medicine and Pharmacology	4
PA 530	Diagnostic Tests and Procedures I	1
	Subtotal	13
Spring I		
PA 509	Anatomy for Physician Assistants II	4
PA 517	Medical Interview and Physical Assessment II	2
PAL 517	Medical Interview and Physical Assessment Lab II	1
PA 570	Clinical Medicine I	6
PA 544	Pharmacotherapeutics I	4
PA 531	Diagnostic Tests and Procedures II	1
	Subtotal	18
Summer 2		
PA 519	PA Clinical Skills	1
PAL 519	PA Clinical Skills Lab	1
PA 513	Healthcare Systems and Issues in Healthcare	1
PA 579	Primary Care Practicum I	2
	Subtotal	5
Fall 2		
PA 670	Clinical Medicine II	5
PA 644	Pharmacotherapeutics II	4
PA 532	Diagnostic Tests & Procedures II	1
PA 614	Epidemiology, Research and Interpreting the Medical Literature	3
PA 611	Humanities for the PA Profession	2
PA 671	Women's Health	2
	Subtotal	17

Spring 2			
PA		Clinical Rotations*	10
PA	600	Rotation Seminar I	1
		Subtotal	11
Summer 3			
PA		Clinical Rotations*	5
PA	601	Rotation Seminar II	.5
		Subtotal	5.5
Fall 3			
PA		Clinical Rotation*	2.5
PA	690	Community Preceptorship Clinical Practicum	4
PA	603	Capstone Seminar	1
PA	612	Health Promotion, Disease Prevention & Community Resources	2
		Subtotal	9.5
Nonspecific Term			
HP		Graduate Professional Elective**	3
		Total	86

*Sequence of clinical practica will vary by student.

**Additional requirement: Each student is required to take at least one 3 credit professional elective course that is interdisciplinary in nature. Scheduling will be determined by the student based on course availability and consultation with advisor. Generally, graduate courses with the HP prefix will be approved; however, students may select other graduate courses to fulfill the elective with the approval of their advisor.

Breakdown of Clinical Rotations:

Primary Care Clinical Practicum I (PA 579)	4 weeks
Primary Care Clinical Practicum II (PA 680)	5 weeks
Primary Care Clinical Practicum III (PA 681)	5 weeks
Primary Care Clinical Practicum IV (PA 682)	5 weeks
Emergency Medicine Clinical Practicum (PA 683)	5 weeks
Surgical Clinical Practicum (PA 685)	5 weeks
Inpatient Care Clinical Practicum (PA 687)	5 weeks
Elective Clinical Practicum (PA 689)	5 weeks
Community Preceptorship Clinical Practicum (PA 690)	8 weeks
Total =	47 weeks

PHYSICIAN ASSISTANT STUDIES (PA)

PA 504 Medical Physiology and Genetics

An overview of physiological processes that influence the human organism at the cellular, organ and systemic levels. Includes a discussion of normal function and focuses on how normal physiology impacts upon a patient's health and well-being. A case study approach is used to assist students in the application of fundamental principles to clinical situations and to begin the process of understanding dysfunction and pathology likely to be encountered in the clinical setting. Includes an introduction to the scientific concepts related to genetics and molecular basis of disease. Three credits.

PA 507 Neuroscience

This course provides an introduction to how the nervous system functions to control behavior. It addresses the structure of the nervous system and how it functions under normal and pathological conditions organized by functional system with focus on diagnosis of neurological disorders. Particular attention is paid to the central pathway for each functional system and the clinical aspects of damage to the system. One credit.

PA 508 Anatomy for Physician Assistants I

This first course provides an in-depth study of human anatomy, including an introduction to anatomical and medical terminology and foundational information on human development and structure fundamental to considerations of function, physical diagnosis, trauma and disease. Using a regional approach, this course places emphasis on obtaining functional knowledge of normal human gross anatomy of the thorax and upper extremities as a basis for solving clinical problems related to these body regions. Prerequisite: PA 504. Four credits.

PA 509 Anatomy for Physician Assistants II

This course provides an in-depth study of human anatomy, including an introduction to anatomical and medical terminology and foundational information on human development and structure fundamental to considerations of function, physical diagnosis, trauma and disease. Using a regional approach, this course places emphasis on obtaining functional knowledge of normal human gross anatomy of the abdomen, lower extremities and head and neck as a basis for solving clinical problems related to these body regions. Prerequisite: PA 508. Four credits.

PA 511 Introduction to the Physician Assistant Profession

This course is an overview of the history and philosophy of the physician assistant profession and the role of PAs in the health care field; and includes a review of current professional issues and organizations relevant to the PA profession as well as issues that may impact the profession in the future. This course also includes a review of medical terminology to provide a foundation for further study. One credit.

PA 513 Healthcare Systems and Issues in Healthcare

This course is an introduction to issues and systems related to the delivery of health care in the United States such as health care settings, health care costs and reimbursement issues, the evaluation of health care quality, an overview of health care provider roles, and a focus on the delivery of health care via a team approach. It will include an introduction to the common policies and legal issues encountered by physician assistants such as liability insurance, privacy rules, and informed consent. Public health principles (including epidemiology) and utilization of public health officials by a PA will also be discussed. Prerequisite: PA 511. One credit.

PA 515 Medical Interviewing and Physical Assessment I

This course includes the development of the knowledge and skills required to competently take a medical history and perform a physical examination, recognize normal and abnormal findings, and record the findings in the medical record. It also includes an introduction to the art of patient and family/practitioner communication and effective interviewing for the purpose of establishing a health database and follow-up care. This course will provide an overview of the medical record as well as development of writing and organizational skills for medical record keeping. Corequisite: PAL 515. Two credits.

PAL 515 Medical Interviewing and Physical Assessment Lab I

This laboratory based course will focus on the development of the skills required to competently take a medical history and perform a physical examination, recognize normal and abnormal findings, and record the findings in the medical record. It includes introduction to the art of patient and family/practitioner communication and effective interviewing for the purpose of establishing a health database and follow-up care. This course will provide an overview of the medical record as well as development of writing and organizational skills for medical record keeping. Corequisite: PA 515. One credit.

PA 517 Medical Interviewing and Physical Assessment II

This course provides for the development of the knowledge and skills required to competently take a medical history and perform a physical examination, recognize normal and abnormal findings, and record the findings in the medical record. It also includes the art of medical interpretation and the delivery of information to patients and their family members. Prerequisite: PA 515. Corequisite: PAL 517. Two credits.

PAL 517 Medical Interviewing and Physical Assessment Lab II

This laboratory based course will focus on the development of the skills required to competently take a medical history and perform a physical examination, recognize normal and abnormal findings, and record the findings in the medical record. Prerequisite: PAL 515. Corequisite: PA 517. One credit.

PA 519 PA Clinical Skills

This lecture based course focuses on the development of diagnostic and therapeutic skills including administration of medications, basic surgical skills and clinical procedures commonly performed in primary care physician assistant practice. Corequisite: PAL 519. One credit.

PAL 519 PA Clinical Skills Laboratory

This laboratory based course focuses on the development of diagnostic and therapeutic skills including administration of medications, basic surgical skills and clinical procedures commonly performed in primary care physician assistant practice. Corequisite: PA-519. One credit.

PA 521 Introduction to Clinical Medicine and Pharmacology

This course provides an intensive study of human diseases and disorders across the lifespan from the perspectives of pathophysiology, epidemiology, etiology, clinical manifestations, progression, therapy (including emergency and surgical treatment when indicated), and prognosis. It will emphasize diseases common to primary care practices, and the development of a differential diagnosis and plan based upon the patient's clinical presentation. In addition, the course will include a study of the general principles of pharmacology including classification, mechanisms of action and the rational use of drugs for the diagnosis, prevention and treatment of disease, and includes appropriate selection, dosing and monitoring. The rational use of drugs for the diagnosis, prevention and treatment of disease will be presented in lecture and case study format. Prerequisite: PA 504. Co-requisite: PA 530. Four credits.

PA 530 Diagnostic Tests and Procedures I

This course is an introduction to the use and interpretation of commonly used diagnostic tools including laboratory studies and radiologic procedures related to clinical disorders. Corequisite: PA 521. One credit.

PA 531 Diagnostic Tests and Procedures II

This course develops the knowledge of, the proper use, and interpretation of commonly used diagnostic tools including laboratory studies and radiologic procedures related to clinical disorders. Prerequisite: PA 530. Corequisite: PA 570. One credit.

PA 532 Diagnostic Tests and Procedures III

This course develops the knowledge, the proper use, and interpretation of commonly used diagnostic tools including laboratory studies and radiologic procedures related to clinical disorders. Prerequisite: PA 531. One credit.

PA 544 Pharmacotherapeutics I

A study of the general principles of pharmacology including classification, mechanisms of action and the rational use of medications for the diagnosis, prevention and treatment of disease. The appropriate selection, dosing and monitoring of medication is also reviewed. Prerequisite: PA 521. Corequisite: PA 570. Four credits.

PA 570 Clinical Medicine I

This course is an intensive study of human diseases and disorders across the lifespan from the perspectives of pathophysiology, epidemiology, etiology, clinical manifestations, progression, therapy (including emergency and surgical treatment when indicated), and prognosis. Emphasis will be on diseases common to primary care practices and the development of a differential diagnosis and plan based upon the patient's clinical presentation. Prerequisite: PA 521. Corequisite: PA 544. Six credits.

PA 579 Primary Care Clinical Practicum I

This is a community based practical learning experience designed to increase student competence at delivering periodic well care including prenatal care, management of chronic disease and treatment of episodic illnesses across the lifespan in outpatient and inpatient settings. In this first clinical rotation, emphasis will be placed on developing student skills in eliciting a medical history and performing the appropriate physical exam. The student will also participate in the patient assessment and the development of the diagnostic, therapeutic and management plans. These will be obtained through objective guided, patient contact experiences supervised by community health care providers. Prerequisite: PA 570. Two credits.

PA 599 Independent Study

A course designed for students needing or desiring additional in-depth study on a topic or topics selected in conjunction with a faculty advisor. One to three credits.

PA 600 Clinical Rotation Seminar I

This course utilizes multiple modalities to expand the clinical year student's knowledge of the business of medicine, advanced clinical procedure skills and knowledge of clinical medicine delivered via lecture, group work, and workshops. In addition, coursework and examinations in this course will assess the student's competence in the documentation of patient encounters, development of assessments, treatment plans, interpretation of diagnostic studies and knowledge of the clinical medicine topics outlined in the NCCPA blueprint and in the clinical rotation courses. Prerequisite: 579. One credit.

PA 601 Clinical Rotation Seminar II

This course utilizes multiple modalities to expand clinical year students' knowledge of the business of medicine, advanced clinical procedure skills and knowledge of clinical medicine delivered via lecture, group work and workshops. In addition, coursework and examinations in this course will assess students' competence in the documentation of patient encounters, development of assessments, treatment plans, interpretation of diagnostic studies and knowledge of the clinical medicine topics outlined in the NCCPA blueprint and in the clinical rotation courses. Prerequisite: PA 579. One-half credit.

PA 603 Capstone Seminar

This course provides students with the opportunity to demonstrate that they have achieved the goals and objectives of the physician assistant program and are prepared to enter the workforce as competent and caring health care providers. Corequisite: PA 690. One credit.

PA 611 Humanities for the PA Profession

This course provides a review of sociologic and humanitarian issues related to the art of medicine including medical ethics, patient experiences of loss, and cultural issues. This course will include an emphasis on the personal development of the PA practitioner. Prerequisite: PA 513. Two credits.

PA 612 Health Promotion, Disease Prevention and Community Resources

An introduction to the basic concepts of health promotion and disease prevention and the development of strategies to affect healthy lifestyle changes in the individual and community. An investigation of community resources will also be included. Students will be required to develop and implement an individual health prescription or community service/education project. Course is offered via web-based/computer-assisted instruction and periodic seminars. Corequisite: PA 690. Two credits.

PA 614 Epidemiology, Research and Interpreting Medical Literature

This course is a study of the principles of evidence-based medicine including application of techniques for review, interpretation, and analysis of medical/scientific literature. It includes an introduction to epidemiology and biostatistics. Prerequisite: PA 570. Three credits.

PA 644 Pharmacotherapeutics II

This course is a study of the general principles of pharmacology including classification, mechanisms of action and the rational use of drugs for the diagnosis, prevention and treatment of disease. The appropriate selection, dosing and monitoring of medication is also reviewed. Prerequisite: PA 544. Corequisite: PA 670. Four credits.

PA 670 Clinical Medicine II

This course will be an intensive study of human diseases and disorders across the lifespan from the perspectives of pathophysiology, epidemiology, etiology, clinical manifestations, progression, therapy (including emergency and surgical treatment when indicated) and prognosis. Emphasis will be on diseases common to primary care practices and the development of a differential diagnosis and plan based upon the patient's clinical presentation. Prerequisite: PA 570. Corequisite: PA 644. Five credits.

PA 671 Women's Health

This course provides an intensive study of the concepts related to the evaluation and care of women during the stages of pregnancy through the postpartum period. It includes preventive care principles and procedures related to women's health and disorders specifically related to the female reproductive tract. Prerequisite: PA 521. Two credits.

PA 680 Primary Care Clinical Practicum II

This is a community based practical learning experience designed to increase student competence at delivering periodic well care including prenatal care, management of chronic disease, and treatment of episodic illnesses across the lifespan in outpatient and inpatient settings. Increasing skill is expected in the delivery of patient care through eliciting a history and physical exam, arriving at appropriate assessment, developing a differential diagnosis, ordering diagnostic studies, performing diagnostic and therapeutic procedures as well as prescribing pharmacotherapeutic and non-pharmacotherapeutic treatment plans that include appropriate follow-up measures. Student will be guided through patient contact experiences supervised by health care providers. Prerequisite: PA 579. Two and one-half credits.

PA 681 Primary Care Clinical Practicum III

This is a community based practical learning experience designed to increase student competence at delivering periodic well care including prenatal care, management of chronic disease, and treatment of episodic illnesses across the lifespan in outpatient and inpatient settings. Increasing skill is expected in the delivery of patient care through eliciting a history and physical exam, arriving at appropriate assessment, developing a differential diagnosis, ordering diagnostic studies, performing diagnostic and therapeutic procedures as well as prescribing pharmacotherapeutic and non-pharmacotherapeutic treatment plans that include appropriate follow-up measures. Student will be guided through patient contact experiences supervised by health care providers. Prerequisite: PA 579. Two and one-half credits.

PA 682 Primary Care Clinical Practicum IV

This is a community based practical learning experience designed to increase student competence at delivering periodic well care including prenatal care, management of chronic disease, and treatment of episodic illnesses across the lifespan in outpatient and inpatient settings. Increasing skill is expected in the delivery of patient care through eliciting a history and physical exam, arriving at appropriate assessment, developing a differential diagnosis, ordering diagnostic studies, performing diagnostic and therapeutic procedures as well as prescribing pharmacotherapeutic and non-pharmacotherapeutic treatment plans that include appropriate follow-up measures. Student will be guided through patient contact experiences supervised by health care providers. Prerequisite: PA 579. Two and one-half credits.

PA 683 Emergency Medicine Clinical Practicum

This is a community based practical learning experience designed to increase student competence at delivering health care for all age groups in the emergent and urgent setting. Increasing skill is expected in the delivery of patient care through eliciting a history and physical exam, arriving at appropriate assessment, developing a differential diagnosis, ordering diagnostic studies, performing diagnostic and therapeutic procedures as well as prescribing pharmacotherapeutic and non-pharmacotherapeutic treatment plans that include appropriate follow-up measures. Student will be guided through patient contact experiences supervised by health care providers. Prerequisite: PA 579. Two and one-half credits.

PA 685 Surgical Clinical Practicum

This is a community based practical learning experience designed to increase student competence at delivering preoperative, intraoperative and postoperative health care in inpatient and outpatient settings across the lifespan. The experience is designed to increase competence in delivery of patient care appropriate to the physician assistant profession. Student will be guided through patient contact experiences supervised by health care providers. Prerequisite: PA 579. Two and one-half credits.

PA 687 Inpatient Care Clinical Practicum

This is a community based practical learning experience designed to increase student competence at delivering medicine in the inpatient setting. Focus will be management of acute and chronic disease across the lifespan in an inpatient setting. Increasing skill is expected in the delivery of patient care through eliciting a history and physical exam, arriving at appropriate assessment, developing a differential diagnosis, ordering diagnostic studies, performing diagnostic and therapeutic procedures as well as prescribing pharmacotherapeutic and non-pharmacotherapeutic treatment plans that include appropriate follow-up measures. Student will be guided through patient contact experiences supervised by health care providers. Prerequisite: PA 579. Two and one-half credits.

PA 689 Elective Clinical Practicum

This is a community based practical learning experience designed to increase student competence at delivering health care. Elective rotations will typically take place in a medical subspecialty in which the student has a particular interest. This experience can occur in outpatient and/or inpatient settings, and may occur in a setting which is not a typical health care clinic but impacts patient health. The student will develop increased competence in knowledge and skills related to the physician assistant profession. Objectives for the rotation will be developed by the student and preceptor in concert with the clinical coordinator. Prerequisite: PA 579. Two and one-half credits.

PA 690 Clinical Preceptorship Clinical Practicum

This is a community based practical learning experience designed to increase student competence at delivering periodic well care including prenatal care, management of chronic disease and treatment of episodic illnesses across the lifespan in outpatient and inpatient settings. This course will increase competence in delivery of care through eliciting appropriate history and physical exam, arriving at appropriate assessment and differential diagnoses, ordering appropriate diagnostic studies, performing appropriate diagnostic and therapeutic procedures as well as designing and implementing pharmacotherapeutic and non-pharmacotherapeutic treatment plans that include appropriate follow-up measures. These skills will be obtained through objective guided, patient contact experiences supervised by community health care providers. This clinical experience is longer in duration to focus on longitudinal care of the patient and integration of the student into the community. Prerequisite: PA 579. Four credits.

PSYCHOLOGY (PSY)**PSY 501 Practica in Behavior Analysis**

Supervised clinical experience integrating classroom material and applied behavior analysis. Must be completed four times for a total of 12 credits. Three credits.

PSY 561 Concepts and Principles of Behavior Analysis

Introduction to the philosophical assumptions and basic principles, processes, and concepts of behavior analysis. Three credits.

PSY 562 Research Methods in Behavior Analysis

Selection and application of measurement systems and experimental design. Prerequisite: PSY 561. Three credits.

PSY 563 Applied Behavior Analysis

Examination of the fundamental elements of behavior change and specific behavior change procedures. Prerequisite: PSY 562. Three credits.

PSY 564 Advanced Applied Behavior Analysis

Application of behavior analysis beginning with identification of the client through measurement, intervention, implementation, and assessment. Prerequisite: PSY 563. Four credits.

PSY 571 Autism

Introduction to Autism Spectral Disorders through the lens of the social, emotional, physiological and educational needs from diagnosis through intervention and supports. Three credits.

PSY 572 Ethical, Legal and Professional Conduct in Behavior Analysis

Examination of the ethical, legal and professional principles of behavior analysis. Three credits.

BERNARD J. DUNN SCHOOL OF PHARMACY

Alan McKay, Dean
Health Professions Building – Pharmacy
(540) 665-1282

Penny Shelton, Assistant Dean, Academic Affairs
Health Professions Building – Pharmacy
(540) 678-4395

Doctor of Pharmacy

The purpose of the Doctor of Pharmacy (PharmD) Program is to prepare entry-level pharmacy practitioners to meet the health care needs of an increasingly diverse patient population, and to constantly strive to add to the knowledge base of the profession of pharmacy. This includes use of the newest instructional techniques, experiential learning and exposure to the latest information concerning pharmacy care as taught by a creative and innovative faculty.

In fulfilling its educational mission, the school provides the environment, opportunities and stimuli for faculty, students and practitioners of the profession to learn, maintain and expand upon the knowledge and skills necessary to meet the health care needs of the patients they serve. Through a combination of traditional instruction, the innovative use of computer technology and the latest concepts of distance education, the school seeks to provide the highest quality instruction to both traditional and nontraditional learners. The School of Pharmacy supports the concept that the mission of pharmacy is to serve society as the profession responsible for the appropriate use of medications, devices and services to achieve optimal therapeutic outcomes.

Entrance Requirements

Admission into the Doctor of Pharmacy Degree Program is determined by the School of Pharmacy Admissions Committee. Consideration for admission requires a minimum cumulative grade point average (GPA) of 2.5 on a 4.0 scale for the 65 semester hours of prerequisite coursework. All students are required to take the Pharmacy College Admission Test (PCAT). All application processing for the traditional PharmD program is through the PharmCAS Central Application Service at www.PharmCAS.org. Although these applications are processed differently, they are held to the same standards as Shenandoah University's other graduate programs. Instructions for the admissions process can be found at <http://pharmacy.su.edu>. After review of completed applications, qualified applicants will be invited for an interview.

Degree Requirements

Conferral of the Doctor of Pharmacy Degree requires the successful completion of 142 credit hours in the didactic and experiential curriculum (not including prerequisite courses) with a minimum cumulative 2.0 grade point average.

Accreditation

The professional pharmacy program is fully accredited by the Accreditation Council for Pharmacy Education (ACPE), 135 South LaSalle Street, Suite 4100, Chicago, IL 60603-4810. Graduates are eligible to sit for the North American Pharmacist Licensure Examination (NAPLEX) administered by the National Association of Boards of Pharmacy.

Requirements for the Doctor of Pharmacy Degree

First Professional Year, Fall

Course	Title	Credit Hours
PHAR 501	Introduction to Pharmacy Practice	1
PHAR 508	Pharmaceutics I (Calculations)	2
PHAR 516	Introductory Pharmacy Practice Experience I	2
PHAR 518	Communication and Psychosocial Principles	2
PHAR 526	Integrated Basic Health Sciences Lab I	1
PHAR 545	Integrated Basic Health Sciences I	3
PHAR 546	Integrated Basic Health Sciences II	3
PHAR 549	Nonprescription Products	3
PHAR 550	Outpatient Pharmacy Practice Lab	1
	Subtotal	18

First Professional Year, Spring

Course	Title	Credit Hours
PHAR 512	Pharmaceutics II	4
PHAR 513	Pharmaceutics II Laboratory	1
PHAR 517	Introductory Pharmacy Practice Experience II	2
PHAR 530	Integrated Basic Health Sciences Lab II	1
PHAR 534	Essentials of Pharmacogenomics	2
PHAR 547	Integrated Basic Health Sciences III	3
PHAR 548	Integrated Basic Health Sciences IV	3
PHAR 551	Sterile Compounding Lab	1
PHAR 552	Clinical Drug Information Skills	1
	Subtotal	18

Second Professional Year, Fall

Course	Title	Credit Hours
PHAR 600	Pharmacokinetics Principles	3
PHAR 662	Drug Literature Analysis & Interpretation	4
PHAR 663	Drug Literature Analysis & Interpretation Lab	1
PHAR 664	Pharmacy Law	3
PHAR 665	Introduction to Patient Assessment	1
PHAR 667	Introductory Pharmacy Practice Experience III	1
PHAR 668	Pharmacology	4
	Subtotal	17

Second Professional Year, Spring

Course	Title	Credit Hours
PHAR 607	Integrated Pharmaceutical Care and Science (Respiratory)	2
PHAR 608	Integrated Pharmaceutical Care and Science (Renal)	2
PHAR 619	Integrated Pharmaceutical Care and Science (Cardiovascular)	4
PHAR 632	Applied Pharmacokinetics and Pharmacogenomics I	1
PHAR 669	Health Information Technology and Practice Management	3
PHAR 670	Introductory Pharmacy Practice Experience IV	1
PHAR 671	Toxicology	2
	Professional Elective(s)	3
	Subtotal	18

Third Professional Year, Fall

Course	Title	Credit Hours
PHAR 709	Integrated Pharmaceutical Care and Science (Hem/Onc)	3
PHAR 723	Patient Assessment I	2
PHAR 733	Applied Pharmacokinetics and Pharmacogenomics II	1
PHAR 736	Pharmacy Administration I	2
PHAR 741	Integrated Pharmaceutical Care and Science (Endo/Repro)	3
PHAR 742	Integrated Pharmaceutical Care and Science (Infectious Diseases)	4
	Professional Elective(s)	3
	Subtotal	18

Third Professional Year, Spring

Course	Title	Credit Hours
PHAR 700	Integrated Pharmaceutical Care and Science (GI/Nutrition)	2
PHAR 708	Integrated Pharmaceutical Care and Science (Musculoskeletal)	2
PHAR 720	Integrated Pharmaceutical Care and Science (Neuro/Psychiatry)	3
PHAR 724	Patient Assessment II	2
PHAR 734	Applied Pharmacokinetics and Pharmacogenomics III	1
PHAR 737	Pharmacy Administration II	3
PHAR 738	Introductory Pharmacy Practice Experience V	1
	Professional Elective(s)	3
	Subtotal	17

Fourth Professional Year

Course	Title	Credit Hours
PHAR 800	Ambulatory Care APPE*	5
PHAR 801	Community Clinical APPE	5
PHAR 803	In-Patient Acute Care APPE	5
PHAR 804	Institutional APPE	5
PHAR 806	Selective APPE II	5
PHAR 807A	Selective APPE I:A	2
PHAR 807B	Selective APPE I:B	3
PHAR 808	Advanced Pharmacy Practice APPE	5
PHAR 825	Pharmacy Practicum APPE	1
	Subtotal	36
	Total	142

*APPE is Advanced Pharmacy Practice Experience.

PAM 708 Internship in Performing Arts Medicine

This course will help the student set up and participate in experiential learning in the field of performing arts medicine. The study will observe/practice at a site approved by the PAM program director where performing arts injury prevention, evaluation, management or clinical research is occurring. The student will submit a report on the experience to the course coordinator. Prerequisite: PAM 705 for Track I and PAM 707 for Track II. Two credits.

PAM 709 Performing Arts Medicine Capstone

This course reviews the materials covered throughout the certificate program followed by the student completing a comprehensive written, oral and practical examination. Prerequisites: For Track I: PAM 705, PAM 706 and PAM 708; for Track II: PAM 706, PAM 707 and PAM 708. One credit.

PHARMACY (PHAR)**PHAR 501 Introduction to Pharmacy Practice**

This course orients the first professional year student pharmacist to the social, emotional, and political environments that exist in the practice of pharmacy. The provision of pharmaceutical care and medication management for the patient is introduced. The role of the pharmacist in a variety of practice settings is examined. This course is limited to first professional year student pharmacists. One credit.

PHAR 508 Pharmaceutics I (Calculations)

Pharmaceutics I examines the system of weights and measures and the arithmetical and mathematical expertise required for the compounding, dispensing, and utilization of drugs. Basic technical aspects of dispensing drugs and medical terminology will be discussed. Classes will consist of lecture, case presentations and drill and practice (both problem sets and computer-based). This course is limited to first professional year student pharmacists. Two credits.

PHAR 512 Pharmaceutics II

Pharmaceutics II emphasizes the study of the legal, practical and scientific bases of drug products and pharmaceutical delivery systems. It presents physicochemical theories, terminology, pharmaceutical skills, and interpretation of the formulation and performance of pharmaceutical products. This course is limited to first professional year student pharmacists. Prerequisite: PHAR 508. Corequisite: PHAR 513. Four credits.

PHAR 513 Pharmaceutics II Laboratory

Pharmaceutics II Laboratory introduces and develops the skills and techniques required to formulate and produce pharmaceutical products. This course is limited to first professional year student pharmacists. Corequisite: PHAR 512. One credit.

PHAR 516 Introductory Pharmacy Practice Experience I

Student pharmacists will perform patient care and pharmacist functions under the direct supervision of the pharmacist preceptor for their introductory pharmacy practice experiences in community and health-system pharmacy. Student pharmacists will gain a total of 80 hours of experience in the community pharmacy setting. This course is limited to first professional year student pharmacists. Two credits.

PHAR 517 Introductory Pharmacy Practice Experience II

Student pharmacists will perform patient care and pharmacist functions under the direct supervision of the pharmacist preceptor for their introductory pharmacy practice experiences in community and health-system pharmacy. Student pharmacists will gain a total of 80 hours of experience in the health-system pharmacy setting. This course is limited to first professional year student pharmacists. Prerequisite: PHAR 516. Two credits.

PHAR 518 Communication and Psychosocial Principles

This course will introduce communication skills (empathy, assertiveness training, effective listening, etc.) and present psychological and sociological challenges and barriers induced by physical and mental illnesses and disabilities. Skills to cope with and improve emotional and spiritual well-being and enhance quality of life will be taught. The course will also develop skills in professional communications including resume writing, CV writing, and interviewing skills. This course is limited to first professional year student pharmacists. Two credits.

PHAR 526 Integrated Basic Health Sciences Laboratory I

Integrated Basic Health Sciences Laboratory I provides laboratory experiences, which integrate anatomy, physiology, biochemistry, immunology and biotechnology. Students will conduct experiments, usually in small groups, which illustrate important concepts in the basic health sciences that are particularly relevant to pharmacists. The experiments will also show that the different basic sciences must be used at the same time to provide scientific explanations of the practice of pharmacy. This course is limited to first professional year student pharmacists. Corequisites: PHAR 545 and PHAR 546. One credit.

PHAR 530 Integrated Basic Health Sciences Lab II

Integrated Basic Health Sciences Laboratory II provides laboratory experiences, which integrate anatomy, physiology, biochemistry, immunology and biotechnology. Students will conduct experiments, usually in small groups, which illustrate important concepts in the basic health sciences that are particularly relevant to pharmacists. The experiments will also show that the different basic sciences must be used at the same time to provide scientific explanations of the practice of pharmacy. This course is limited to first professional year student pharmacists. Corequisites: PHAR 547 and PHAR 548. One credit.

PHAR 534 Essentials of Pharmacogenomics

The rapidly emerging discipline of pharmacogenomics addresses the heritable variability in the way a person, based on their genetic make up, responds to drugs. The Essentials of Pharmacogenomics course will introduce student pharmacists to topics in genetics, cell biology, molecular biology, and biochemistry as relevant to the field of pharmacogenomics. Additionally, student pharmacists will be introduced to some common laboratory techniques currently in use in pharmacogenomics research labs and quickly evolving topics such as economics, informatics, and policy. The course will serve as the foundation for future discussions of pharmacogenomics in the more advanced pharmacy curriculum and prepare pharmacists as key players in the future of personalized medicine. This course is limited to first professional year student pharmacists. Prerequisite: PHAR 545. Two credits.

**PHAR 545 Integrated Basic Health Sciences Module I
(Biochemistry, Skin, Bones, Muscle)**

Integrated Basic Health Sciences (IBHS) combines biochemistry, anatomy, physiology, and pathophysiology into one comprehensive course. Topics covered in this module portion of IBHS include biocompounds, molecular biology, cell biology, microbe biology, integument system, skeletal system, and the muscle system. This course is limited to first professional year student pharmacists. Corequisite: PHAR 526. Three credits.

**PHAR 546 Integrated Basic Health Sciences Module II
(Nervous System, Endocrine System)**

Integrated Basic Health Sciences (IBHS) combines biochemistry, anatomy, physiology, and pathophysiology into one comprehensive course. Topics covered in this module portion of IBHS include neurons, neurotransmitters, brain functions, hormones, and regulation of glands. This course is limited to first professional year student pharmacists. Prerequisite: PHAR 545. Corequisite: PHAR 526. Three credits.

**PHAR 547 Integrated Basic Health Sciences Module III
(Cardiovascular, Defense, Respiration)**

Integrated Basic Health Sciences (IBHS) combines biochemistry, anatomy, physiology, and pathophysiology into one comprehensive course. Topics covered in this module portion of IBHS include blood, circulation, heart functions, blood pressure, immunity, gas exchange, and lung functions. This course is limited to first professional year student pharmacists. Prerequisite: PHAR 546. Corequisite: PHAR 530. Three credits.

**PHAR 548 Integrated Basic Health Sciences Module IV
(Renal, Digestion, Reproduction)**

Integrated Basic Health Sciences (IBHS) combines biochemistry, anatomy, physiology, and pathophysiology into one comprehensive course. Topics covered in this module portion of IBHS include fluid regulation, kidney functions, regulation of digestion, nutrients, fertilization, pregnancy, and development. This course is limited to first professional year student pharmacists. Prerequisite: PHAR 547. Corequisite: PHAR 530. Three credits.

PHAR 549 Nonprescription Products

This course addresses nonprescription products and examines the pharmacist's role in helping the public choose appropriate products. The course will address nonprescription drug pharmacology, adverse effects, drug-drug interactions, and drug-food interactions. Other non-pharmacological over-the-counter products will be discussed including devices and durable medical equipment. The pharmacist's role in dispensing these products will also be addressed. This course is limited to first professional year student pharmacists. Three credits.

PHAR 550 Outpatient Pharmacy Practice Laboratory

This laboratory course is designed to prepare students for outpatient pharmacy settings. Prescription filling and labeling, order interpretation, counseling, demonstrating the use of medical devices, insurance troubleshooting, recognizing and preventing prescription errors, pharmaceutical calculations, and general law guidelines pertaining to outpatient pharmacy practice are included. This course is limited to first professional year student pharmacists. One credit.

PHAR 551 Sterile Compounding Laboratory

This course utilizes lectures and laboratory exercises to instruct students in sterile compounding and quality assurance. This course is limited to first professional year student pharmacists. Prerequisite: PHAR 508. One credit.

PHAR 552 Clinical Drug Information Skills

This course will present student pharmacists with the fundamentals of the practice of drug information and the application of drug information skills for delivery of pharmaceutical care. Topics include introduction to the use of technology in drug information retrieval and assessing the reliability of various sources to provide evidence-based information to patients, their families, and other involved health care providers. This course is limited to first professional year student pharmacists. One credit.

PHAR 600 Pharmacokinetics Principles

Pharmacokinetics Principles presents the theoretical mathematical relationships and functional physiologic phenomena that comprise the quantitative basis for patient-specific and drug-specific drug dosage regimens. This course emphasizes mathematically and graphically, the interpretation of the 1) rate or time course of drug absorption and elimination, and 2) extent of in vivo distribution for use when calculating the amount and frequency of drug dosage or dosage regimen. Three credits.

PHAR 607 Integrated Pharmaceutical Care and Science (Respiratory)

Respiratory ICARE will present pharmacy students with the pathophysiology of common diseases in respiratory disorders as well as the chemical, pharmacodynamic and pharmacokinetic properties of the drugs used to treat the diseases and the therapeutic management of patients. Enrollment limited to second year professional students. Two credits.

PHAR 608 Integrated Pharmaceutical Care and Science (Renal)

Renal ICARE will present pharmacy students with the pathophysiology of common renal diseases, their complications, electrolyte and acid-base disorders as well as the pharmacodynamic and pharmacokinetic properties of the drugs used to treat these diseases and the therapeutic management of patients. Enrollment is limited to second year professional students. Two credits.

PHAR 614 Parenteral Therapy

Parenteral Therapy presents the pharmaceutical formulation characteristics; microbial, chemical and physical quality control; and compounding and clinical administration practices and precautions of injectable drug and nutrient therapy. This course emphasizes therapy via the intravascular, intramuscular and subcutaneous routes and briefly addresses rarer routes, such as intraarticular; intraarterial, intradermal, intraspinal, etc. Three credits.

PHAR 619 Integrated Pharmaceutical Care and Science (Cardiovascular)

Cardiovascular ICARE will present pharmacy students with the pathophysiology of common diseases of the cardiovascular system as well as the chemical, pharmacodynamic and pharmacokinetic properties of the drugs used to treat the diseases and the therapeutic management of patients. Enrollment limited to second year professional students. Four credits.

PHAR 622 Special Problems in Pharmacy

This course consists of project studies in pharmacy education, basic research or practice. Requirements for this course may include information development or review and are dependent on the instructor. Students enrolled in this course receive diverse perspectives relating to goals, training, functions, settings and opportunities in research in the pharmaceutical sciences and pharmacy practice areas. Prior instructor approval is required. Variable credit: one and one-half or three credits.

PHAR 625 Medicinal Herbs

Medicinal Herbs will present students with information on plants that are or have been used as medicines or sources of medicines. We will discuss FDA regulations and the methods for preparing and using medicinal plants. Up to 40 plants will be covered in the course. The history, mechanism of action, clinical trials, in vivo and in vitro studies, known or possible drug interactions, and identification will be presented for each plant. Three credits.

PHAR 632 Applied Pharmacokinetics and Pharmacogenomics I

Applied Pharmacokinetics and Pharmacogenomics I will build on the concepts presented in PHAR 600 and complement PHAR 607, 608 and 619. It will focus on specific pharmacokinetic and pharmacogenomic issues of individual respiratory, renal and cardiovascular drugs and their clinical applications. Prerequisite: PHAR 600. One credit.

PHAR 634 Total Parenteral Nutrition

This course is offered to increase the student's knowledge of the highly complex provision of total parenteral nutrition. One and one-half credits.

PHAR 637 Medication Therapy Management

The course will focus on Medication Therapy Management (MTM) services and implementation of MTM services in community pharmacy practice. The course will review the role of pharmacy with the various healthcare insurers and the history and need for MTM services. Students will review the pros and cons for compensation for these services. Students will also develop a strategic plan for implementation of MTM services into a community pharmacy. One and one-half credits.

PHAR 638 Pharmacy Based Immunization Delivery

This course, which is based on the American Pharmacist Association (APhA) Pharmacy-Based Immunization Delivery Certificate Program, provides comprehensive immunization education and training, including the disease states prevented, recommended child and adult immunizations and the administration of subcutaneous and intramuscular injections. Additionally, topics in pharmacy emergency preparedness such as bioterrorism agents, national strategic stockpile and opportunities for pharmacist involvement are addressed. Upon successful completion, an APhA certificate is issued which is valid for life and allows immunization administration by the pharmacist (dependent on individual state law). A fee (approximately \$150) for certification materials is required. One and one-half credits.

PHAR 639 Spanish for Pharmacists

This course is designed to provide student pharmacists with a basis for effectively communicating with Spanish-speaking patients in a pharmacy practice setting. Students will learn general and specific pharmacy-related terminology to communicate and interpret medication information to patients. This course will include participation in oral and auditory exercises and role-playing activities to enhance verbal and listening comprehension skills. Students are required to have at least one semester of college-level Spanish to take this course. Three credits.

PHAR 640 Leadership By Design

This course is designed to permit potential pharmacy leaders the opportunity to explore leadership from three perspectives: 1) self-actualization and personal reflection, 2) critical skill development, and 3) interaction with respected leaders who share a passion for greatness. One and one-half credits.

PHAR 641 Topics in Pharmaceutical Compounding

This course consists of discussions, presentations and hands-on activities related to the practice of pharmaceutical compounding. Three credits.

PHAR 647 International Healthcare

This course will cover the structure and financing of several international health care systems. A number of countries will be discussed that encompass the range of philosophies of health finance and delivery that exist in the world. Emphasis will be placed on discussion of the differences between each selected country's health care system and the U.S. system, focusing on the strengths and weaknesses of other approaches to the provision of healthcare. One and one-half credits.

PHAR 652 Introduction to Mental Health for Pharmacists

This course will examine the historical treatment of mental illness in the United States from the first state hospital in Williamsburg, VA to reviewing the basics of pharmacology for psychiatric medications. Movie clips will be used to illustrate various mental illnesses. Students will be required to read and coordinate the class discussion of chapters in the required text. Students will also be required to conduct a presentation on a topic of their choice. Visits to the local National Alliance of the Mentally Ill chapter (NAMI) are possible. One and one-half credits.

PHAR 653 Medication Errors

Health care professionals need to develop and maintain an ongoing process that uncovers potential risks while promoting ways to eradicate vulnerability to medication errors. The course will cover causes and analysis of medication errors, patient and physician perspectives of safety, high alert medications and the role of technology and patient literacy in preventing medication misadventures. One and one-half credits.

PHAR 657 Healthcare Disparities

This course will expose student pharmacists to health disparities existing among the medically underserved in a variety of pharmacy settings and specialties. Although the focus of the course will be health disparities within the United States, other countries' health care systems will be compared and discussed. Students will begin to develop the skills necessary to build pharmacy services and interventions targeting underserved priority populations. This course is available for second and third professional year pharmacy students. One and one-half credits.

PHAR 658 Global Medicine

This course will introduce the basics of global health issues in improving health and reducing the burden of disease in the most vulnerable populations. The class will review the complexities of global health delivery, health education and health promotion within the context of varying cultural constructs. This course will be open to second and third professional year pharmacy students. One and one-half credits.

PHAR 660 Principles of Toxicology

This course is designed to focus on the role of toxicology within the pharmacy profession. Topics will include mechanisms of toxicity, disposition of toxic agents within biological systems, principles of toxicokinetics, target organ toxicity, the role of genetics in toxicity, and non-organ-directed toxicity. Clinically relevant examples will be used throughout class discussions. Enrollment is limited to second and third year professional students. Three credits.

PHAR 661 Emergency Preparedness

This course is designed to provide student pharmacists with an understanding about the importance of emergency preparedness in pharmacy. Health care professionals need to be able to respond efficiently in the face of disastrous situations. This course will cover several aspects of emergency preparedness at the regional, state and national level. This course will also cover specific topics selected from various natural disasters, outbreaks, mass casualty, bioterrorism, chemical and radiation emergencies. This course is open to second and third professional year pharmacy students. Three credits.

PHAR 662 Drug Literature Analysis and Interpretation

The staggering size and varying quality of the clinical literature require that the pharmacy student develop sophisticated methods for managing the literature and critically evaluating the data that they often represent. This course will present the student with the knowledge and tools necessary to manage this area of practice. Corequisite: PHAR 663. Four credits.

PHAR 663 Drug Literature Analysis and Interpretation Lab

This course will reinforce the concepts taught in PHAR 662 by giving the students hands-on laboratory practice with the concepts. Corequisite: PHAR 662. One credit.

PHAR 664 Pharmacy Law

This course focuses on the federal and state laws governing the practice of pharmacy. The course will emphasize introductory legal concepts that encompass the rights and responsibilities of the pharmacist and a practical application of these concepts. Three credits.

PHAR 665 Introduction to Patient Assessment

This course is the first part of the patient assessment course sequence in which students will be introduced to the patient medical chart and medical documentation. The process of interpreting lab values, reading a medical chart/dictation, as well as being able to analyze a patient drug regimen will be reviewed. The students will gain practical knowledge in obtaining medical information from a patient and writing SOAP note cases related to self-treatment illnesses. One credit.

PHAR 667 Introductory Pharmacy Practice Experience III

Students will perform patient care and pharmacist functions under the direct supervision of the pharmacist preceptor for their introductory pharmacy practice experience in the health-system pharmacy. Students will gain a total of 40 hours in the health-system pharmacy setting. This course is limited to second professional year student pharmacists. Prerequisite: PHAR 517. One credit.

PHAR 668 Pharmacology

This course is designed to focus on physical and chemical properties, mechanism of action, physiological actions, and therapeutic uses of drugs. Pharmacology topics covered in this course are intended to provide students with an introductory exposure to the pharmacological impact of autonomic, CNS, endocrine and other agents. This will provide a foundational framework for application in the Integrated Pharmaceutical Care and Science sequence. Four credits.

PHAR 669 Health Information Technology and Practice Management

This course will present second year professional pharmacy students with the fundamentals of health information technology (HIT) and its impact on the practice of pharmacy. Topics include basic terminology, the use of data in quality improvement initiatives and information systems currently used in health care. This is the first of three courses in the Pharmacy Administration sequence. Three credits.

PHAR 670 Introductory Pharmacy Practice Experience IV

Students will perform patient care and pharmacist functions under the direct supervision of the pharmacist preceptor for their introductory pharmacy practice experience in a community pharmacy and providing direct patient care. Students will gain a total of 20 hours in the community pharmacy setting and 40 hours either in a community pharmacy or a direct patient care or specialty pharmacy site. This course is limited to second professional year student pharmacists. Prerequisite: PHAR 667. One credit.

PHAR 671 Toxicology

Toxicology is the study of the adverse effects of chemicals on living organisms and includes the study of symptoms, mechanisms, treatments and detection of toxic agents. The course is designed to include information on both environmental toxins and the most common drug overdoses. Through this course, students will gain an understanding of how toxic agents affect physiological systems and potential treatment options. Prerequisite: PHAR 668. Two credits.

PHAR 672 Bioethics in Film

This course is designed to provide second and third year pharmacy students with an introduction to various philosophies in bioethics and ethical issues faced in everyday practice in the healthcare setting. Lecture, class discussions and film will be used to help students apply these philosophies, critically evaluate various medical ethical situations, and develop self-awareness about their own values, as well as others. One and one-half credits.

PHAR 700 Integrated Pharmaceutical Care and Science (GI Disease/Nutrition)

The Gastrointestinal Disease and Nutrition ICARE will present pharmacy students with the pathophysiology of common diseases of the gastro-intestinal tract and nutrition, as well as the chemical, pharmacodynamic and pharmacokinetic properties of the medications used to treat the diseases and the therapeutic management of patients. Enrollment limited to third year professional students. Two credits.

PHAR 708 Integrated Pharmaceutical Care and Science (Musculoskeletal)

Musculoskeletal ICARE will present pharmacy students with the pathophysiology of common diseases in musculoskeletal, dermatologic and ophthalmologic systems as well as the chemical, pharmacodynamic and pharmacokinetic properties of the drugs used to treat the disorders and the therapeutic management of patients. Enrollment limited to third year professional students. Two credits.

PHAR 709 Integrated Pharmaceutical Care and Science (Hem/Onc)

Hematology/Oncology ICARE will present pharmacy students with the pathophysiology of hematologic and oncologic diseases and disorders, as well as the chemical, pharmacodynamic and pharmacokinetic properties of the drugs used to treat the diseases and the therapeutic management of patients. Enrollment limited to third year professional students. Three credits.

PHAR 720 Integrated Pharmaceutical Care and Science (Neuro/Psychiatry)

NeuroPsych ICARE will present pharmacy students with the pathophysiology of common diseases in neurological and psychiatric disorders as well as the chemical, pharmacodynamic and pharmacokinetic properties of the drugs used to treat the diseases and the therapeutic management of patients. Enrollment limited to third year professional students. Three credits.

PHAR 723 Patient Assessment I

In this course which compliments PHAR 724, students will integrate assessment skills and Integrated Pharmaceutical Care and Science (ICARE) course material in order to enhance patient assessment and pharmaceutical care skills. The course allows for the application and refinement of interpersonal verbal and written skills through case studies in the setting of patient encounters. This course will employ various active learning methodologies to refine critical thinking, pharmacy practice and patient care skills and develop written communication skills necessary for the practice of pharmacy. This course is available for third professional year pharmacy students who have successfully completed their first and second year. Two credits.

PHAR 724 Patient Assessment II

In this course which compliments PHAR 723, students will integrate assessment skills and Integrated Pharmaceutical Care and Science (ICARE) course material in order to enhance patient assessment and pharmaceutical skills. The course allows for the application and refinement of interpersonal verbal and written skills through case studies in the setting of patient encounters. This course will employ various active learning methodologies to refine critical thinking, pharmacy practice and patient care skills and develop written communication skills necessary for the practice of pharmacy. This course is available for third year professional pharmacy students who have successfully completed their first and second year. Two credits.

PHAR 733 Applied Pharmacokinetics and Pharmacogenomics II

Applied Pharmacokinetics and Pharmacogenomics II will build on the concepts presented in PHAR 600 and complement PHAR 709, PHAR 741 and PHAR 742. It will focus on specific pharmacokinetic and pharmacogenomic issues of individual antibiotics, hormonal and oncology drugs and their clinical applications. Prerequisite: PHAR 632. Corequisites: PHAR 709, PHAR 741 and PHAR 742. One credit.

PHAR 734 Applied Pharmacokinetics and Pharmacogenomics III

Applied Pharmacokinetics and Pharmacogenomics III will build on the concepts presented in PHAR 600 and complement PHAR 700, 708 and 720. It will focus on specific pharmacokinetic and pharmacogenomic issues of individual gastrointestinal and nutritional, musculoskeletal, neurosensory and psychiatric drugs and their clinical applications. Prerequisite: PHAR 733. Corequisites: PHAR 700, PHAR 708 and PHAR 720. One credit.

PHAR 736 Pharmacy Administration I

This course provides an overview of the structure, organization and financing of the U.S. health care system with an emphasis on the implications of the complex social and economic environment on the practice of pharmacy. Two credits.

PHAR 737 Pharmacy Administration II

This is a pharmacy management skills course that is designed to enhance the professional effectiveness of students and provide them with a broad information base essential to efficient resource allocation in professional practice settings. Three credits.

PHAR 738 Introductory Pharmacy Practice Experience V

Students will perform patient care and pharmacist functions under the direct supervision of the pharmacist preceptor for their introductory pharmacy practice experience in an acute care or ambulatory care clinical practice. Students will gain a total of 40 hours of experience in the acute care or ambulatory care settings. This course is limited to third professional year student pharmacists. Prerequisite: PHAR 670. One credit.

PHAR 739 Preparation for Post-graduate Education

This course introduces third year pharmacy students to postgraduate training opportunities. Students will be introduced to different types of residency and fellowship training programs and to the application and interview process. Students will be taught how to develop a curriculum vitae (CV) and letter of intent; how to prepare for residency showcases, the ASHP Match, onsite interviews and presentations; how to apply through PhORCAS; how to apply to a fellowship; and more. One and one-half credits.

PHAR 740 Evidence-Based Medicine

This is an advanced elective course designed to give students further experiences in utilizing the best evidence to current practice. The course will provide students the practice of not only evaluating literature but also analyzing it according to practical decisions that need to be made for individual patients. This course will be open to third professional year pharmacy students. One and one-half credits.

**PHAR 741 Integrated Pharmaceutical Care and Science
(Endocrine/Reproduction)**

The Endocrine and Reproduction ICARE will present pharmacy students with the pathophysiology of common diseases in endocrinology and reproduction (female and male issues), as well as the chemical, pharmacodynamic and pharmacokinetic properties of the drugs used to treat the diseases and the therapeutic management of patients. Prerequisites: PHAR 607, PHAR 608 and PHAR 619. Enrollment limited to third year professional students. Three credits.

PHAR 742 Integrated Pharmaceutical Care and Science (Infectious Diseases)

The Infectious Disease ICARE will present pharmacy students with the pathophysiology of common infectious diseases as well as the chemical, pharmacodynamic and pharmacokinetic properties of the drugs used to treat the diseases and the therapeutic management of patients. Prerequisites: PHAR 607, PHAR 608 and PHAR 619. Enrollment limited to third year professional students. Four credits.

PHAR 800 Ambulatory Care Advanced Pharmacy Practice Experience

Students will be assigned a preceptor for an Advanced Pharmacy Practice Experience (APPE) at the preceptor's practice site. Each equivalent week of experience shall contain an average of forty hours of practice. The student will perform pharmacist functions while under the direct supervision of the preceptor. This advanced pharmacy practice experience will provide the student experience in an ambulatory care practice setting. This course is for fourth year pharmacy students. Five credits.

PHAR 801 Community Clinical Advanced Pharmacy Practice Experience

Students will be assigned a preceptor for an Advanced Pharmacy Practice Experience (APPE) at the preceptor's practice site. Each equivalent week of experience shall contain an average of forty hours of practice. The student will perform pharmacist functions while under the direct supervision of the preceptor. This advanced pharmacy practice experience will provide the student experience in a community clinical setting. This course is for fourth year pharmacy students. Five credits.

PHAR 803 In-Patient Acute Care Advanced Pharmacy Practice Experience

Students will be assigned a pharmacist preceptor for an Advanced Pharmacy Practice Experience (APPE) at the pharmacist's practice site. Each equivalent week of experience shall contain an average of forty hours of practice. The student will perform pharmacist functions while under the direct supervision of the pharmacist preceptor. This advanced pharmacy practice experience will provide the student experience in an inpatient acute care setting. This course is for fourth year pharmacy students. Five credits.

PHAR 804 Institutional Advanced Pharmacy Practice Experience

Students will be assigned a preceptor for an Advanced Pharmacy Practice Experience (APPE) at the preceptor's healthcare institution. Each equivalent week of experience shall contain an average of forty hours of practice. The student will perform pharmacist functions while under the direct supervision of the pharmacist preceptor. This advanced pharmacy practice experience will provide the student experience in an institutional (hospital) practice setting. This course is for fourth year pharmacy students. Five credits.

PHAR 806 Selective Advanced Pharmacy Practice Experience II

Students will be assigned a preceptor for an Advanced Pharmacy Practice Experience (APPE) at the preceptor's practice site. Each equivalent week of experience shall contain an average of forty hours of practice. The student will perform pharmacist functions while under the direct supervision of the preceptor. This selective advanced pharmacy practice experience will provide the student experience in a pharmacy practice setting. This course is for fourth year pharmacy students. Five credits.

PHAR 807A Selective Advanced Pharmacy Practice Experience I:A

Students will be assigned a preceptor for an Advanced Pharmacy Practice Experience (APPE) at the preceptor's practice site. Each equivalent week of experience shall contain an average of forty hours of practice. The student will perform pharmacist functions while under the direct supervision of the preceptor. This selective advanced pharmacy practice experience will provide the student experience in a pharmacy practice setting. This course is for fourth year pharmacy students. Two credits.

PHAR 807B Selective Advanced Pharmacy Practice Experience I:B

Students will be assigned a preceptor for an Advanced Pharmacy Practice Experience (APPE) at the preceptor's practice site. Each equivalent week of experience shall contain an average of forty hours of practice. The student will perform pharmacist functions while under the direct supervision of the preceptor. This selective advanced pharmacy practice experience will provide the student experience in a pharmacy practice setting. This course is for fourth year pharmacy students. Three credits.

PHAR 808 Advanced Pharmacy Practice APPE

Students will be assigned a preceptor for an Advanced Pharmacy Practice Experience (APPE) at the preceptor's practice site. Each equivalent week of experience shall contain an average of forty hours of practice. The student will perform pharmacist functions while under the direct supervision of the preceptor. This advanced pharmacy practice experience will provide the student experience in an advanced pharmacy practice setting. This course is for fourth year pharmacy students. Five credits.

PHAR 825 Pharmacy Practicum Advanced Pharmacy Practice Experience

The senior practicum project is designed to provide entry-level, fourth-year pharmacy students with exposure to outcomes-based issues to help uncover many questions remaining in the practice of pharmacy and healthcare. The practicum project should address where the majority of these students will work, the changing face of pharmacy practice, and give them the opportunity to positively influence pharmacy practice. The project is not for the purpose of creating researchers, but instead competent practitioners capable of rendering pharmaceutical care. The practicum project is to be complementary to and separate from the existing advanced pharmacy practice experience during the fourth year of pharmacy school, so students should not expect to fulfill its requirements during rotations so as to prevent them from successfully completing the objectives developed by the director of experiential education for the rotation site at which the research is conducted. The student is expected to spend at least 40 hours completing this project. One credit.

RN to MSN Degree (Fall entry only)

Janice Smith, Professor and Associate Dean of Student Affairs

Health & Life Sciences Building, Office 161, (540) 665-5504, jsmith9@su.edu

The RN to MSN degree in the School of Nursing enables students who are registered nurses without a BSN to obtain an MSN degree within one of four roles: Nurse-Midwifery, Family Nurse Practitioner, Health Systems Management and Psychiatric Mental-Health Nurse Practitioner. Students pursuing the RN to MSN degree complete 13-17 credits of undergraduate nursing bridge courses and between 36-48 credits of graduate courses depending on their role. Students must have completed all required undergraduate prerequisite courses to be considered for admission.

Students admitted for the RN-MSN degree must successfully complete the NLN Health Assessment exam prior to taking N 401 Health Across the Lifespan: Communities. If unsuccessful, N 201 Health Assessment must be completed prior to taking N 401.

Graduate students enrolled in the RN to MSN degree are taught competencies in their chosen role areas. The Nurse-Midwifery, Family Nurse Practitioner and Psychiatric Nurse Practitioner graduates are eligible to take the appropriate national certification exams. For graduates wishing to practice in states requiring a bachelor's degree in addition to the MSN, a BSN option is available. (See information directly following.)

Prerequisite Courses and General Education Requirements

Course Title	Credits
Human Anatomy and Physiology I and II and Labs	8
Microbiology	4
Chemistry	4
Statistics	3
English Composition	3
English Literature	3
Psychology	3
Sociology	3
Public Speaking	3
Religion, Ethics or Philosophy	3
Subtotal	37
RN Nursing Transfer Credits	36-40
Total	73-77

Interested students are strongly encouraged to meet with a nursing faculty member/ advisor to review transcripts from previous institutions attended.

*Bridge Courses

Course	Title	Credits
N 319	Ethics and Genomics in Nursing Practice	3
N 414	Leadership and Management in Professional Nursing Practice	3
N 306	Theory, Reasoning and Research in Nursing	3
N 401	Human Health Across the Lifespan: Communities	5*
	Total	14**

*Three class hours/week and six clinical hours/week.

**Total bridge course credits will be 18 if health assessment course must be taken.

Bridge courses must be successfully completed prior to enrolling in any graduate level MSN courses.

Family Nurse Practitioner

Patricia Krauskopf, Professor and Director, Family Nurse Practitioner Program
Health & Life Sciences Building, Office 264, (540) 665-5512, pkrausko@su.edu

The FNP Program is designed to provide the nurse with the necessary knowledge, skills, values, meanings and experiences to assume the role of a primary health care provider in a variety of clinical settings. Didactic and clinical course content focuses on assessment and management of health promotion and health maintenance strategies, risk reduction, common acute and chronic alterations in health status for individuals and families across the lifespan and role development. Clinical experiences are provided in a wide variety of ambulatory and community rural and medically underserved health care settings appropriate for the Family Nurse Practitioner student. There are approximately 690 clinical hours in the program.

Family Nurse Practitioner Courses

Course	Title	Credits
NP 570	Applied Pharmacology and Therapeutics (taken concurrently with NPLB 570)	2*
NPLB 580	Advanced Assessment Lab	1*
NP 610	Primary Care of Families I	3
NP 620	Primary Care of Families II	3*
NP 630	Primary Care of Women and Children	3
NPLB 650	Primary Care of Families Practicum I	3*
NPLB 670	Primary Care of Families Practicum II	3*
NPLB 680	Primary Care Advanced Practicum	4*
NP 690	Advanced Nurse Practitioner Role Development	1
	Graduate Elective	3
	Total	26

*This course includes clinical experiences. The ratio of clinical to clock hours is 1: clinical hour = 4 clock hours.

NURSING (N)**N 502 Principles of Teaching and Learning in Health Care Education**

This course is designed to assist the student in developing knowledge, skills, values, meanings and experiences associated with effective teaching and learning practices in health care. The course will include approaches to teaching and learning theories used to develop the scope and standards of practice in the academic educator role. Instructional technology will be introduced. Three credits.

N 503 Curriculum Design in Nursing Education

This course introduces the process of curriculum design, implementation and evaluation. Students will review essential components of nursing curricula and methods for ensuring internal consistency within a curriculum. Prerequisite: N 502. Three credits.

N 506 Data Analysis and Interpretation I

The intent of this applied statistics course is on the analysis and interpretation of health care research data and introduction to the use of SPSS. A critical introduction to the methods used to collect data: surveys, archival research, experiments and participant observation. Basic concepts of hypothesis testing, estimation, correlation, confidence intervals, t-tests, chi-square tests, simple linear regression and the one-way analysis of variance will also be included. Student must take N 512 before or concurrently with this course. Three credits.

N 511 Informatics and Technology in Health Care

This course is designed to assist the student in developing knowledge, skills, values, meanings and experiences associated with health care information systems and associated technology. The course provides an overview of current information systems and assists students in learning how to use technology to support safe, effective and efficient decision-making. Concurrent enrollment in NLAB 511 is required. Two credits.

N 512 Theory, Research and Reasoning I

This course is designed to assist the student in developing advanced knowledge, skills, values, meanings and experiences associated with theory, research and reasoning and their utilization in implementing and developing advanced nursing practice. Emphasis is placed on advanced understanding of the research process, the role theoretical frameworks play and the development of research evidence. Three credits.

N 513 Seminar in Health Informatics Technology

This course is designed to assist students in attaining the knowledge, skills, values, meanings and experiences associated with synthesizing the impact of technology, information management and knowledge generation, professional roles, trends and issues, ethics and system life cycle development through seminars in these topic areas. This course assists in developing an overview of current information systems and its effects on the future of health care practice, research and education. Corequisite: N 511. One credit.

N 515 Emergency Preparedness and Disaster Nursing

This course explores the health care response to a variety of disasters and naturally occurring phenomena that present public health emergencies. Types of disasters that are explored include environmental, mass casualty, naturally occurring infectious diseases, and acts of terrorism and bioterrorism. The course is designed to assist the student in developing competency in responding to disasters through emergency preparedness and disaster management. Permission of nursing faculty is required. Three credits.

N 521 Theory, Research and Reasoning II

This course is designed to assist the student in preparing to implement quantitative research. Emphasis is placed on identifying nursing phenomena, developing researchable questions/hypotheses and conducting a comprehensive, scholarly review of the literature. Prerequisites: N 506 and N 512. Three credits.

N 532 Roles and Issues in Advanced Practice

This course provides the student with the opportunity to further develop knowledge, skills, values and meanings with regard to the advanced practice role and factors influencing advanced practice. Topics include health care policy, finance, legal and ethical issues, and advanced practice role development. Three credits.

N 533 Faith Community Nursing

This course will be the foundation for advanced practice in faith community nursing. This course is designed to assist the student in developing the knowledge, skills, values, meanings and experiences to begin a faith community nursing practice. It provides an in-depth exploration of the theory, research and practical issues related to faith community nursing. Management of a faith community nurse practice and spiritual care will be the main foci. Students will explore their own spiritual development and practices as a foundation to caring for others. Four credits.

N 534 Health Disparities in Rural Settings

This course will aid the student to develop the knowledge, skills, values, meanings and experiences to critically analyze the complexity of health disparities in rural settings rooted in multiple levels of historic and contemporary inequities. These levels include health care systems, health policies, distributions of and access to resources and health care professionals. The critical thinking process throughout the course will emphasize ethical considerations. Existing multi-level intervention strategies aimed at eliminating health disparities will be assessed, including those specific to rural settings as well as community-academic partnerships that translate research into action. Three credits.

N 535 Faith Community Nurse Coordinator

This course will prepare the Faith Community Nurse (FCN) for advanced practice as a FCN Coordinator. This course will assist the student in developing knowledge, skills, values, meanings and experiences associated with the role identity, responsibilities and scope of the position of FCN Coordinator. The student will obtain skills necessary to successfully work with individual FCNs and their congregations in the community. The course will present the FCN Coordinator's role in the ongoing growth and self care for themselves and the individual FCNs they are supervising. Prerequisite: N 533. Two credits.

N 545 Roles, Trends and Issues in Health Informatics

This course provides an opportunity to acquire the knowledge, skills, values, meanings and experiences for students to apply and synthesize the concepts of health professional roles in the health informatics field. Leadership and organizational management in technology-rich practice, research and education environments will be emphasized. Students will gain the experience needed to develop guidelines for distance learning, e-portfolios, electronic health records and telehealth. Ethics, trends and issues relevant to the present and future of health professional practice, research and education will be discussed. Three credits.

N 550 Advanced Pharmacology and Therapeutics

This course allows the student to develop advanced knowledge, skills, values, meanings and experiences associated with pharmacological and therapeutics for specialized populations. Three credits.

N 551 International Health Care

This course provides students with the opportunity to discuss knowledge, skills, values, meanings and experiences associated with international health care as part of the Global Experiential Learning (GEL) program. The focus is on health care problems, health education and health care delivery systems in selected countries. Students will identify health care problems and discuss approaches to meeting health needs for various populations in the world. Students will become familiar with worldwide agencies working to promote health care and how governments are developing policy and providing health care within their political, economic, social and cultural contexts. The role of nursing and health care providers in promoting health and providing health care in the international community will be discussed. The course utilizes discussion, inquiry and exploration of international health care and delivery systems. Students will be expected to research the country selected for visitation within the GEL program. Three credits.

N 560 Advanced Concepts in Physiology and Pathophysiology

This course is designed to assist the student in developing broader knowledge, skill, values, meanings and experiences associated with physiology and pathophysiology. Cellular, tissue, organ, and system concepts are emphasized as well as the use of scientific literature. Three credits.

N 575 Adult and Adolescent Physical and Sexual Assault

This course is designed to provide a basis for study of the evolving status of forensic nursing. Students will explore issues, identifying trends that influence the development of this specialty, and interacting while working with professional members of a multidisciplinary team involved in the care of victims of violent crime. The course will also provide the knowledge, skills, values, meanings, and experiences necessary for performing forensic evaluations on adult and adolescent victims of sexual/physical assault. Emphasis is placed on providing interventions that are congruent with age, health status, culture, occupation, legal and ethical concerns. Three credits.

N 580 Advanced Health Promotion and Assessment Across the Lifespan

This course is designed to assist the student in developing knowledge, skills, values, meanings and experiences associated with advanced health promotion, anticipatory guidance, and health promotion across the life span of specialized and culturally diverse populations. Clinical experiences include laboratory practice and community-based experiences in a variety of primary care sites located in urban and rural, underserved areas. Concurrent enrollment in NLAB 580 is required. Prerequisite: N 560. Four credits.

N 582 Perspectives in Midwifery and Primary Care

The intent of this course is to assist the student in acquiring and applying the knowledge, skills, values meanings and experiences of diversity in the perspectives of midwifery caring for women and their families. Three credits.

N 583 Applied and Interactive Genetics

This multidisciplinary course is designed to assist the student in developing broader knowledge, skills, values, meanings and experiences associated with basic genetics, applied genetics, and selected genetic disorders. Three credits.

N 599 Independent Study: Self Study in Advanced Practice Issues

This course is designed for graduate students who want to engage in the evolving status of professional nursing by exploring issues and identifying trends that influence the profession. One to three credits.

N 600 Data, Information and Knowledge

Data, Information and Knowledge is a self-paced course that focuses on the nature of data, the concepts of information and knowledge, principles of relationship database systems, operations, information systems, data sets, data standards and classification systems. Three credits.

N 604 Evaluation of Teaching and Learning in Nursing Education

This course focuses on the design and development of evaluation, measurement and testing in nursing education, both in the classroom and clinical setting. The course will also include evaluation experiences to develop and analyze tests and the use of technology. Prerequisite: N 502. Three credits.

N 605 Trends, Issues and Technology in Nursing

This course provides an opportunity to acquire knowledge, skills, values, meanings and experiences for using technologies to enhance the teaching-learning process and/or clinical practice including using media, multimedia and technology-rich and online learning environments. Emphasis is also on the examination of the current trends and issues that relevant to the present and future of nursing. Prerequisite: N 502. Three credits.

N 608 Health Informatics System Development

This course provides an opportunity to acquire the knowledge, skills, values, meanings and experiences for students to create informatics projects in practice, research or education. In this course, students use the System Life Cycle (NI Competency I) to plan, analyze and design their own informatics projects. The System Life Cycle process will be continued in N 615 towards completion. Sixty hours of clinical is associated with this course. Prerequisite: N 545. Three credits.

N 610 Informatics and the Health Care Delivery System

This is a cohort course designed to introduce students to the field of health care informatics. It focuses on the history of health care informatics, basic informatics concepts, and the information management applications. Three credits.

N 615 Health Informatics System Dissemination

This course builds on N 608 to provide an opportunity to acquire the knowledge, skills, values, meanings and experiences for students to complete informatics projects in practice, research or education. In this course, students use the System Life Cycle (NI Competency I) to implement, test, evaluate, maintain and support their own informatics projects. Dissemination of the project in a public forum is expected. One hundred twenty clock hours of clinical is associated with this course. This course is offered in the second eight weeks of a 16-week semester. Prerequisite: N 608. Three credits.

N 620 Information System Life Cycle

This course focuses on a structured approach to the selection and implementation of an information system. This structured approach is called the information system development life cycle. The course incorporates five modules corresponding to the five phases of the life cycle: planning, analysis, design, implementation and evaluation. Four credits.

N 634 Sexuality and Health: The Human Perspective

This course is designed to provide the health professional with a basis for understanding the sociocultural, biological, and behavioral aspects of human sexuality across the life span, with an emphasis on assessment, risk reduction counseling, and prevention education. Three credits.

NLAB 699 Independent Study: Practicum in Advanced Practice Issues

This course is designed to provide a basis for advanced study of the evolving status of advanced practice nursing by exploring issues and identifying trends that influence the profession. The course includes participation in clinical or research process. One, two or three clinical credits.

N 705 Epidemiology and Biostatistics

This course prepares the student to integrate principles of epidemiology and biostatistics into effective decision-making when caring for complex and vulnerable populations. Emphasis is on study design and interpretation of biostatistical and quantitative methods in epidemiology and the clinical application in evidenced-based health care and decision-making methods. Graduate level statistics and research courses are required before enrollment in this course. Three credits.

N 710 Grant Writing

This DNP course will explore funding sources for research projects designed to enhance nursing knowledge of advanced clinical practice. Students will learn skills necessary for development and construction of a research and/or project grant. One credit.

N 725 Integration of Healthcare Research and Statistics

This course requires the student to integrate and organize relevant research literature, design an appropriate study methodology and select a statistical analysis for a research plan. The value of triangulation is introduced, while emphasis is placed on understanding the strengths and weaknesses of quantitative and qualitative research methods. Prerequisite: N 705. Three credits.

N 732 Roles and Issues in Advanced Practice Management

This course assists the DNP student in developing an advanced practice role and analyzing factors influencing advanced practice. Topics include leadership in primary care; business, finance and economic aspects of primary care management; influence of health law; and quality improvement through the use of clinical practice guidelines, outcomes and evaluation. Three credits.

N 760 Complex Diagnostics in Primary Care

This course is designed to assist the DNP student in developing knowledge, skills, values, and meanings associated with complex diagnostics used in primary care. Concurrent enrollment in NLAB 760 is required. Three credits.

N 770 Complex Pharmacotherapy

The intent of this course is to assist DNP students in developing advanced knowledge, skills, values, meanings and experiences in prescribing and monitoring multiple pharmacological agents safely and appropriately in vulnerable populations with complex disease states. Emphasis will be on the role of potentiation, synergy, antagonism and pharmacokinetics in complex, multi-drug therapy. In addition, pharmacogenomics theory will be explored as a basis for drug selection. Analysis of simulated and actual case studies will be used to enhance experiential learning. Concurrent enrollment in NLAB 770 is required. One credit.

N 771 Clinical Research Proposal

This course is intended to assist the DNP student in developing a clinically significant proposal to conduct a small yet clinically significant research project in primary care. Prerequisite: N 525. Three credits.

NLAB 784 Advanced Practice Synthesis I

This course is an integrative clinical course that encompasses the students' previous education and allows them to begin to develop expertise in their selected specialty track. Prerequisites: NPLB 680 or PMH 695 for BSN-DNP only. One and one-half credits.

NLAB 785 Advanced Practice Synthesis II

This course is an integrative clinical course that encompasses the students' previous education and allows them to achieve expertise in their selected specialty track. NLAB 784 must be taken prior to or in conjunction with NLAB 785. One and one-half credits.

N 800 Clinical Research Implementation I

This course is intended to assist the DNP student in implementing his/her previously completed research proposal. Individual tutorial assistance is given to the student in the research project stage of his/her program. The student in N 800 will work toward final committee approval of the project, IRB approval and initial and mid-stages of data collection and analysis. Prerequisite: N 771. Three credits.

N 801 Clinical Research Implementation II

This course is intended to assist the DNP student in implementing his/her previously approved research proposal and proceeding until completion and dissemination of the project. Individual tutorial assistance is given to students in the research project stage of their program. The student in N 801 will work toward final data collection, analysis and dissemination of results. The student may enroll in N 801 for subsequent semesters until the scholarly clinical project requirements have been completed and the student is ready for graduation. Prerequisite: N 800. One credit.

NURSING – Family Nurse Practitioner (NP)**NP 570 Applied Pharmacology and Therapeutics**

The intent of this course is to assist the students in developing knowledge, skills, values, meanings and experiences in prescribing pharmacological agents safely and appropriately for clients who experience commonly occurring illness or for those who need preventive therapy. Emphasis is on the safe and appropriate prescription of pharmacotherapy, client education and monitoring practices regarding the therapy and assessment of therapeutic outcomes. Concurrent enrollment in N 560, NPLB 570 and N 550 is required. Two credits.

NPLB 580 Advanced Assessment Lab

This course is designed to enhance the nurse practitioner student's development of knowledge, skills, values, meanings and experiences associated with advanced health assessment and promotion across the life span, focusing on skills and experiences. The course includes the practice of health assessment and promotion within the family framework of infant, child, adolescent, adult, elderly, male and female. Special attention is given to promoting health and preventing and detecting disease in communities that are culturally diverse, medically underserved, rural and urban. Permission of the nursing faculty is required. Prerequisite: N 580. One credit.

NP 610 Primary Care of Families I

This course is designed to assist the student in developing advanced, specialized nursing knowledge, skills, values, meanings and experiences associated with positively influencing the lived health experience of adult men and women and the elderly. Students will explore the common chronic health and illness patterns presented by adults accessing care in an ambulatory care setting. Students will exercise critical thinking in the analysis of health patterns. Students will synthesize therapeutic nursing interventions including pharmacotherapeutics, appropriate diagnostic tests and health promotion strategies, to positively manage health in partnership with clients. Prerequisites: NP 570 and N 580. Three credits.

NP 620 Primary Care of Families II

This course is designed to assist the student in developing advanced, specialized nursing knowledge, skills, values, meanings and experiences associated with positively influencing the lived health experience of adult men and women and the elderly. Students will explore the common acute health and illness patterns presented by adults accessing care in an ambulatory care setting. Students will exercise critical thinking in the analysis of health patterns. Students will synthesize therapeutic nursing interventions including pharmacotherapeutics, appropriate diagnostic tests and health promotion strategies, to positively manage health in partnership with clients. Prerequisites: NP 570 and N 580. Three credits.

NP 630 Primary Care of Women and Children

This course is designed to assist the student in developing advanced, specialized nursing knowledge, skills, values, meanings and experiences associated with positively influencing the lived health experience of women and children. Students will explore the common health and illness patterns presented by women and children accessing care in an ambulatory care setting. Students will exercise critical thinking in the analysis of health patterns. Students will synthesize therapeutic nursing interventions including pharmacotherapeutics, appropriate diagnostic tests and health promotion strategies, to positively manage health in partnership with clients. Prerequisites: NP 570 and N 580. Three credits.

NPLB 650 Primary Care of Families Practicum I

This course provides the opportunity for the student to apply advanced, specialized nursing knowledge, skills, values, meanings and experiences (KSVME) gained in the core courses and NP 610, NP 620, or NP 630. Practicum experiences assist in the development of the family nurse practitioner (FNP) role while under the mentorship of experienced nurse practitioner preceptors. This clinical course is designed to give the FNP student the opportunity to implement critical thinking strategies and demonstrate specialized therapeutic nursing interventions (TNI), including health promotion, in the direct care of clients across the lifespan with a focus on adults and elderly. Students will be expected to analyze and influence health patterns and to synthesize health promotion strategies and specialized TNI in partnership with clients, to positively influence health. A variety of health care settings will be available for the application of students' KSVME. This course must be taken after or concurrently with NP 610 or NP 620. Three credits.

NPLB 670 Primary Care of Families Practicum II

This course provides the opportunity for the student to apply advanced, specialized nursing knowledge, skills, values, meanings and experiences (KSVME) gained in the core courses and NP 620 Primary Care of Families II. Practicum experiences assist in the development of the family nurse practitioner (FNP) role while under the mentorship of experienced nurse practitioner preceptors. This clinical course is designed to give the FNP student the opportunity to implement critical thinking strategies and demonstrate specialized therapeutic nursing interventions (TNI), including health promotion, in the direct care of clients across the lifespan. Students will be expected to analyze and influence health patterns and to synthesize health promotion strategies and specialized TNI, in partnership with clients, to positively influence health. A variety of health care settings will be available for the application of students' KSVME. This course must be taken after or concurrently with NP 610 or NP 620. Three credits.

NPLB 680 Primary Care Advanced Practicum

This course provides the opportunity for the student to apply advanced, specialized nursing knowledge, skills, values, meanings and experiences (KSVME) gained in the core courses and NP 610, NP 620, and NP 630. Practicum experiences assist in the development of the family nurse practitioner (FNP) role while under the mentorship of experienced nurse practitioner preceptors. This clinical course is designed to give the FNP student the opportunity to implement critical thinking strategies and demonstrate specialized therapeutic nursing interventions (TNI), including health promotion, in the direct care of clients across the lifespan. Students will be expected to analyze and influence health patterns and to synthesize health promotion strategies and specialized TNI in partnership with clients, to positively influence health. A variety of health care settings will be available for the application of students' KSVME. Prerequisites: NPLB 650 and NPLB 670. Four credits.

NP 690 Advanced Nurse Practitioner Role Development

The intent of this course is to assist the student in acquiring and applying the knowledge, skills, values, meanings and experiences of the professional behaviors associated with the practice of the advanced nurse practitioner. This course must be taken in the final spring semester of study. One credit.

Educational Need

A-2: Educational Need

Shenandoah University seeks approval for clinical placements in Maryland for the following programs in the health professions:

Doctor of Pharmacy/Nontraditional Doctor of Pharmacy

M.S.N. – Family Nurse Practitioner

a) Critical and Compelling Need and Demand

There is a critical and compelling need for graduates of these programs both nationally and in the state of Maryland.

1. Occupational Needs

The shortage of health care providers, both nationally and in Maryland, is reflected by the employment outlooks for these fields. The sections below give national and Maryland employment outlooks for the fields for which SU has clinical placements in Maryland. Projections for every area show strong demand for new workers.

Pharmacist

National: "Employment of pharmacists is projected to grow 14 percent from 2012 to 2022, about as fast as the average for all occupations. Increased demand for prescription medications will lead to more demand for pharmaceutical services."
(Bureau of Labor Statistics)

Maryland: Employment of pharmacists is expected to increase 10% from 2012 to 2022, with 1868 new and replacement pharmacists needed during this time.
(Maryland Occupational Projections)

Nursing – MSN

National: "Employment of nurse anesthetists, nurse midwives, and nurse practitioners is expected to grow 31 percent from 2012 to 2022, much faster than the average for all occupations. Growth will occur primarily because of the effects of healthcare legislation, an increased emphasis on preventative care, and demand from the large, aging baby-boom population for healthcare services as they live longer and more active lives than previous generations."
(Bureau of Labor Statistics)

Maryland: Employment of nurse practitioners is expected to increase 15% from 2012 to 2022, with 662 new and replacement nurse practitioners needed during this time.
(Maryland Occupational Projections)

2. Societal Needs

The need for an expanded healthcare workforce is well documented. The U.S. Department of Health and Human Services addresses this need in Strategic Plan Goal 5: Strengthen the Nation's Health and Human Service Infrastructure and Workforce (HHS Strategic Plan). In her comments on Goal 5, HHS Secretary Kathleen Sebelius notes, "We at the Department of Health and Human Services consider it our mission to address the looming health professional workforce shortage and to recruit, train, and retain competent health and human service professionals across America." (HHS Strategic Plan).

The HHS rationale for Goal 5 provides additional insight and data, including the following: (HHS Strategic Plan).

Currently, areas in the Nation face shortages of critical healthcare workers, including primary care physicians, nurses, behavioral health and long-term care workers, as well as public health and human service professionals. Moreover, this problem is anticipated to increase in the coming years. More than 64 million people currently live in a primary-care health professional shortage area, and others live in smaller areas with health professional shortages. More than half of the counties in the United States have no behavioral health worker at all. With the implementation of the Affordable Care Act and the resulting expansion of health insurance coverage, demand for services of primary care professionals will increase substantially.

This shortage is also evident in Maryland. According to the Health Resources and Services Administration (MUA/P by State and County), 58 areas in Maryland are currently designated as Medically Underserved Areas/Populations. Most of the SU FNP clinical placements are in Washington and Allegheny counties, both of which have large areas designated by HRSA as Medically Underserved Areas for primary care.

As demand for medical services grows over the next 10-15 years, the health professions for which Shenandoah University has clinical placements in Maryland can play an important role in addressing these shortages. This is widely discussed in the literature. For example, in Dall et al., new models such as accountable care organizations and patient-centered medical homes are seen as likely to place a greater responsibility on primary care providers, including nurse practitioners and physician assistants as well as allied health professionals for both primary and specialty care (Rodysill, Bertakis). Similarly, Bodenheimer and Smith describe a "demand-capacity gap," and note that non-physician licensed practitioners, including nurses, pharmacists, physical therapists, and occupational therapists, among others, are "seriously underused in their capacity to fill roles generally performed by clinicians."

b) Similar Programs in Maryland

SU Program/MD Schools with Same Program	Distinguishing Features of Shenandoah University Program
<p>Doctor of Pharmacy</p> <p>MD Schools with same program:</p> <p>Notre Dame of Maryland University Univ of Maryland – Eastern Shore Univ of Maryland – Baltimore City</p>	<p>The SU PharmD is offered at two campuses in Northern Virginia (Winchester and Ashburn, VA) that are in close proximity to Maryland. Approximately 20% of our pharmacy students come to our program from Maryland. Students choose the SU program due to the student-centered approach with attention to providing students with the tools needed to practice pharmacy in the changing health care arena. We offer integrated courses in basic sciences and therapeutics, along with courses in evolving fields such as pharmacogenomics and health information technology. The SU PharmD has a pharmacogenomics focus unlike other PharmD schools that offer Ph.D. programs in the field. We are preparing students to understand how pharmacogenomics will be used in patient care, as well as introducing the importance of translational research and drug discovery. Our PharmD students have the option of co-enrolling in the MBA program. The SU PharmD/MBA program is unique to other PharmD programs in that it allows the student to complete each degree to be awarded at graduation simultaneously, as well as the students complete a MBA/management rotation to practice their pharmacy and MBA knowledge and skills. SU PharmD program has fostered relationships over the years with institutions that can cultivate interested students' skills in pharmacogenomics, research, and management career paths; this includes fourth-year rotation options at the NIH in pharmacogenomics and translational research, the Food and Drug Administration, and innovative health care systems (e.g., Johns Hopkins Hospital and Bayview Hospital) that are located in Maryland and ask for our students due to their training. In addition to the fourth year experiential opportunities, our experiential program starts in the first year of pharmacy school to allow students to see and apply their knowledge in the real world. We have sent students to various Maryland</p>

	<p>sites including the Baltimore area, but also in Western Maryland (Hagerstown and Frederick area). Students request these sites since it is going home for them, and they hope to seek future employment opportunities in the area. The sites also recognize this and welcome our students, and have incorporated students into the daily responsibilities of the pharmacy and the pharmacists. The Maryland schools of pharmacy and other out of state programs also send pharmacy students to those sites and the sites appreciate the diversity in the students.</p>
<p>MSN Family Nurse Practitioner</p> <p>MD Schools with same program: University of MD – no longer accepting MS students for FNP and PMHNP - last cohort Fall 2013</p> <p>Salisbury University - DNP only for FNP</p> <p>Comparable FNP programs at Johns Hopkins University School of Nursing Coppin State University Bowie State University</p>	<p>The SU MSN-FNP program targets rural under-served sites and graduates to work in those sites. Most of the SU FNP clinical placements in Maryland are in Washington and Allegheny Counties, both of which have large areas designated by HRSA as Medically Underserved Areas for primary care. (Please see list of clinical sites elsewhere in application.)</p>

- c) These programs are not co-sponsored or directly supported by Maryland employers. However, a number of clinical sites and a university offered letters indicating their support of Shenandoah University's Pharmacy placements in Maryland. These are attached to the application.
- d) Clinical placements are not limited to employees or members of the host site.
- e) These programs are not affiliated with a Maryland Regional Higher Educational Center.

Sources

Bureau of Labor Statistics Occupational Outlook Handbook Jan 8, 2014. United States Department of Labor. Web. March 2015.

Maryland Occupational Projections 2012-2022. Maryland Department of Labor, Licensing, and Regulation. Web. March 2015.

HHS Strategic Plan Goal 5. U.S. Department of Health and Human Services. Web. March 2015.

MUA/P by State and County. Health Resources and Services Administration, U.S. Departments of Health and Human Services. Web. March 2015.

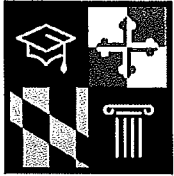
Dall TM et al. An aging population and growing disease burden will require a large and specialized health care workforce by 2025. *Health Affairs*. 2013;32(11):2013-2020.

Rodysill KJ. Increasing physician productivity using a physician extender: a study in an outpatient group practice at the Mayo Clinic. *J Med Pract Manage*. 2003;19(2):110-4.

Bertakis KD, Azari R. Patient-centered care is associated with decreased health care utilization. *J Am Board Fam Med*. 2011;24(3):229-39.

Bodenheimer TS and Smith MD. Primary care: proposed solutions to the physician shortage without training more physicians. *Health Affairs*. 2013;32(11):1881-1886.

Recent Approval Letter



MHEC

Creating a state of achievement

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor

Anwer Hasan
Chairperson

Catherine M. Shultz
Acting Secretary

November 24, 2014

Tracy Fitzsimmons
President
Shenandoah University
1460 University Drive
Winchester, VA 22601

Dear President Fitzsimmons:

The Maryland Higher Education Commission has received an application from Shenandoah University to offer seven programs that include experiential learning components as a required part of the curriculum. I am pleased to inform you that Shenandoah University is authorized to offer the programs as listed below until August 31, 2015. Please note that there are conditions placed on these program approvals.

Approved programs:

- I. Master of Science in Physician Assistant Studies
- II. Doctor of Physical Therapy
- III. Master of Science in Occupational Therapy
- IV. Master of Science in Athletic Training
- V. Master of Science in Nursing

Areas of concentration:

- Health Systems Management
- Nurse-Midwifery
- Psychiatric Mental Health Nurse Practitioner

All programs listed above are approved with the following conditions:

- (i) Shenandoah University shall work directly with students enrolled to secure practica opportunities, where those practica will take place in Maryland.
- (ii) Upon renewal of its certificate of approval to operate in Maryland, Shenandoah University shall submit a list of its practica sites by program, as well as the number of students placed at those sites during the preceding year. The Commission may review placement sites, as well as monitor the number of students placed at those sites, in order to make future determinations regarding the use of those sites.

MARYLAND HIGHER EDUCATION COMMISSION

6 N. Liberty Street • 10th Floor • Baltimore, MD 21201

T 410.767.3301 • 800.974.0203 • F 410.332.0270 • TTY for the Deaf 800.735.2258 www.mhec.state.md.us

The Master of Science in Physician Assistant Studies is approved with the following additional condition:

(i) Field placements must be targeted toward counties which are not currently served by existing physician assistant programs, or are underserved by such programs. Physician Assistant field placements shall not occur in Caroline, Dorchester, Somerset, Talbot, Wicomico or Worcester counties unless placement sites submit documentation which states that their needs for trained physician assistant students are not being adequately met by physician assistant programs on Maryland's Eastern Shore.

Programs not approved:

- I. Doctor of Pharmacy
- II. Bachelor of Science in Nursing
- III. Master of Science in Nursing

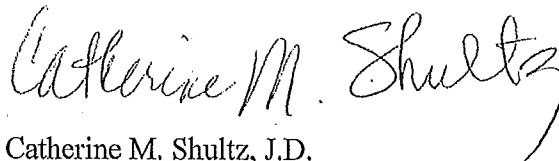
Area of concentration:

- Family Nurse Practitioner

An electronic renewal form and the regulations for out-of-state institutions are available on the Commission's website under "Academic Approval Process" at www.mhec.state.md.us. In order to operate at the approved locations after the stated expiration date, the renewal application should be completed and submitted to this office no later than five months before the institution proposes to commence operation for the academic year 2015-2016. If applicable, the use of VA benefits for these programs should be coordinated through Ms. Trish Gordon-McCown, Veterans Affairs Coordinator. She can be reached at 410-767-3098.

Please keep us informed of any changes contemplated in your offerings in Maryland. We look forward to continuing the cooperative relationship developed between your institution and the Maryland Higher Education Commission.

Sincerely,



Catherine M. Shultz, J.D.
Acting Secretary of Higher Education

CMS:SAB:nl

C: Adrienne Bloss, Vice President for Academic Affairs, Shenandoah University