111

CHAPTER 6 EDUCATIONAL PROGRAMS AND STUDENT LEARNING ASSESSMENT

STANDARD 11 - EDUCATIONAL OFFERINGS
STANDARD 12 - GENERAL EDUCATION (NOT APPLICABLE)

STANDARD 13 - RELATED EDUCATIONAL ACTIVITIES

STANDARD 14 - ASSESSMENT OF STUDENT LEARNING

STANDARD 11: EDUCATIONAL OFFERINGS

112 STATEMENT OF THE STANDARD

PROGRAM

The institution's educational offerings display academic content, rigor, and coherence that are appropriate to its higher education mission. The institution identifies student learning goals and objectives, including knowledge and skills, for its educational offerings.

DECLARATION OF COMPLIANCE

The University's rigorous educational offerings are consistent with its mission. Program goals are clearly articulated and focus on providing students the knowledge and skills they need to succeed in their chosen professions.

EDUCATIONAL OFFERINGS

The University offers a variety of rigorous graduate and professional programs. These programs are closely aligned with the mission of the University and with the standards of each school's respective accrediting body. Adherence to professional accreditation standards, as demonstrated by the continuous accreditation of all of the University's degree programs, is a primary method of determining the rigor and coherence of UMB's educational offerings. The University's degree programs, along with their corresponding accrediting bodies, are listed in the table below.

CURRENT STATUS NEXT REVIEW

SCHOOLS AND PROGRAMS ACCREDITING BODIES

PROGRAM	ACCREDITING BODY	CORRENT STATUS	MENI KEVIEW
School of Dentistry			
DDS	Commission on Dental Accreditation (CODA)	Accredited	2018
Advanced Dental Educ			
in Oral and Maxillofac	ial Surgery CODA	Accredited	2016
BS Dental Hygiene	CODA	Accredited	2018
Carey School of Law			
JD	American Bar Association (ABA)	Accredited	2017
LLM	ABA	Accredited	2017
MSL	ABA	Accredited	2017
School of Medicine			
MD	Liaison Committee for Medical Education (LCME)	Accredited	2016
DPT	Commission on Accreditation in Physical Therapy Education (CAPTE)	Accredited	2016
MGC	Accreditation Council for Genetic Counseling	Accredited	2016
PA	National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)	Accredited	2016
MRT	NAACLS	Accredited	2016
MPH	Council on Education for Public Health (CEPH)	Accredited	2021
School of Nursing			
DNP	Commission on Collegiate Nursing Education (CCNE)	Accredited	2024
MS	CCNE	Accredited	2024
BSN	CCNE	Accredited	2024
School of Pharmacy			
PharmD	Accreditation Council for Pharmacy Education (ACPE)	Accredited	2020
School of Social Work			
MSW	Council on Social Work Education (CSWE)	Accredited	2017

ACCREDITING BODY

113

In addition to the offerings of the professional schools, the Graduate School offers graduate programs in biomedical, health, and human service sciences. These programs are initially reviewed for rigor, coherence, and consistency by the Maryland Higher Education Commission (MHEC) and University System of Maryland (USM).

GRADUATE PROGRAMS OFFERINGS

PROGRAM	Degrees Offered	Program Review	Next Review
Applied Thanatology	Graduate Certificate	USM & UMB	2023
Biochemistry	MS, PhD, MD/PhD	USM & UMB	TBA*
Cellular and Molecular Biomedical Science	MS	USM & UMB	TBA*
Clinical Research	Graduate Certificate	USM & UMB	2016
Epidemiology and Human Genetics	MS, PhD	USM & UMB	2016
Forensic Medicine	MS	USM & UMB	2024
Gerontology	PhD	USM & UMB	2017
Health Science	MS	USM & UMB	2022
Marine-Estuarine Environmental Science	MS, PhD	USM & UMB	TBA*
Medical and Research Technology	MS	USM & UMB	2017
Microbiology and Immunology	PhD, MD/PhD	USM & UMB	TBA*
Molecular Medicine	PhD, MD/PhD	USM & UMB	TBA*
Neuroscience and Cognitive Sciences	PhD, MD/PhD	USM & UMB	TBA*
Nursing	MS, PhD, BSN/PhD	USM & UMB	2016
Oral and Experimental Pathology	PhD	USM & UMB	2018
Pathology	MS	USM & UMB	TBA*
Pharmaceutical Health Services Research	PhD, PharmD/PhD	USM & UMB	2021
Pharmaceutical Sciences	PhD, PharmD/PhD	USM & UMB	TBA*
Pharmacometrics	MS	USM & UMB	2021
Physical Rehabilitation Science	PhD, MD/PhD	USM & UMB	2018
Research Ethics	Graduate Certificate	USM & UMB	2020
Regulatory Science	MS	USM & UMB	2022
Social Work	PhD	USM & UMB	2018
Toxicology	MS, PhD, MD/PhD	USM & UMB	TBA*

^{*}These programs are part of the Graduate Program in Life Sciences (GPILS), which was recently reorganized. Review dates will be announced in fall 2016.

114

PROGRAM GOALS AND OBJECTIVES

Program goals and objectives in each school correspond to the standards of their respective accrediting bodies. All degree programs are constructed so that students learn essential knowledge and skills, assume increasing levels of professionalism and responsibility, and prepare for lifelong learning and service. The schools' program goals implement their respective accreditation standards to form a rigorous and coherent course of study. For example, the program goals for the School of Social Work's MSW program reflect the nine social work competencies outlined in the Council on Social Work Education's (CSWE) 2015 Educational Policy and Accreditation

Standards (EPAS). Additionally, these competencies are listed in the syllabi of each course within the MSW program, along with details on practice behaviors associated with each competency and information about corresponding assignments and assessments. Thus, a student in the School of Social Work can see how each assignment corresponds to a practice behavior of a particular core competency, which in turn corresponds to a program goal.

The following chart provides a sample of program goals from each of the schools. Full listing of program goals.

SAMPLE PROGRAM GOALS

School of Dentistry

Students will:

- Evaluate and assess emerging trends, technologies, and products in health care; and integrate best research outcomes with clinical expertise and patient values for evidence-based practice.
- Utilize critical thinking and scientific knowledge in decision-making processes involved in patient care.
- Utilize and apply ethical and legal reasoning in the provision of dental care.

Carey School of Law

Students will:

- Understand basic concepts of civil procedure, including the rules for processing disputes in federal courts, the relationship between state and federal courts, and the roles of judges, attorneys, and parties in the adversary system.
- Understand basic concepts of the U.S. constitutional system, including separation of powers, federalism, and judicial review.
- Understand basic concepts of contracts, including contract formation, enforceability, conditions, defenses, and remedies.

School of Medicine

The program will:

- Provide a safe, welcoming, and respectful learning environment for all persons regardless of race, gender, creed, national origin, age, disability, or sexual orientation.
- Educate students intensively and broadly in the cultural, clinical, and scientific aspects of medicine.
- Prepare students to engage in a lifetime of learning in order that they may successfully adapt to a changing world.

School of Nursing

Students will:

- Combine theoretical knowledge from the sciences, humanities, and nursing as a foundation to professional nursing practice that focuses on health promotion and prevention of disease for individuals, families, communities, and populations.
- Use the nursing process to manage care for individuals, families, communities, and populations integrating physical, psychological, social, cultural, spiritual, and environmental considerations. Integrate competencies in leadership, quality improvement, and patient safety to improve health and promote interdisciplinary care.
- Use the research process through translation of evidence-based findings to advance professional nursing and the delivery of health care.

Continued on next page

115 SAMPLE PROGRAM GOALS CONT.

School of Pharmacy

Students will aquire:

- Thinking abilities: The student shall find, understand, analyze, evaluate, and synthesize information and shall make informed, rational, and ethical decisions.
- Communication abilities: The student shall read, write, speak, listen, and use data, media, and computers to communicate effectively with various audiences for a variety of purposes.
- Self-learning abilities and habits: The student shall demonstrate the ability and inclination to learn on one's own, to pursue new knowledge, to self-assess, to respond appropriately to assessment by others, and to modify one's ideas in light of new discoveries.

School of Social Work

The program will prepare students:

- For advanced practice with individuals, families, groups, organizations, communities, and society.
- For advanced practice in a method of concentration and an area of specialization.
- To practice in a manner that reflects the principles underlying the Social Work Code of Ethics of the National Association of Social Workers (NASW).

LEARNING RESOURCES

The University offers various learning resources to support its students in achieving the goals of their degree programs. For instance, the Health Sciences and Human Services Library (HS/HSL) is dedicated to providing quality information resources, services, and infrastructure to support the education, research, clinical care, and public service missions of the University. One of the largest health sciences libraries in the United States and a recognized leader in state-ofthe-art information technology, the HS/HSL supports the various programs on campus, as well as the University of Maryland Medical Center (UMMC), the R Adams Cowley Shock Trauma Center, and the Baltimore Veterans Affairs Medical Center. The HS/HSL offers a robust collection of digital resources (journals, databases, books) and counts 363,204 print volumes in its holdings. The library continuously seeks out new resources

Graduate School

The MS in Health Science program will:

- Prepare students to search, interpret, and evaluate the medical literature including interpretation of biostatistical methods, access to common medical databases, and sampling methods.
- Deliver instruction in health care delivery systems and health policy.
- Provide an overview of health care system delivery, patient safety, quality, and risk management.
- Thoroughly review public health as it relates to the role of practicing clinician with regard to prevention of disease, maintenance of public health, and participating in disease surveillance, reporting, and intervention.
- Provide instruction in the principles and practice of medical and public health ethics.

and emerging technologies to advance the campus' mission. In FY15, 116 databases, 17,200 e-books, over 4,900 electronic journals, and more than 48 online tutorials prepared by faculty librarians were accessible through the HS/HSL website, resulting in more than 1.2 million hits to the site.

Within HS/HSL's physical setting, users have space, tools, and technology support to study, discover, and collaborate. The library offers 106 individual study carrels, 45 group study rooms (11 of which are technology enhanced), and 56 computer workstations. There are three computer-equipped teaching labs where hundreds of classes are taught each year. A state-of-the-art presentation practice studio providing recording and editing equipment is available by reservation. Expert assistance is offered if necessary. Two videoconferencing facilities are available for use. An Innovation Space with 3D printing capabilities designed to focus on the research, study, and instructional

116

needs of the UMB community is available on the main floor of the library. To encourage informal group study, there are flexible learning pods and rolling whiteboards throughout the library. To meet the needs of its users, the HS/ HSL is open approximately 90 hours per week (hours vary during exams and holidays).

Students attending the Universities at Shady Grove (USG) in Rockville, Md., have access to both the HS/HSL and to the Shannon and Michael Priddy Library, located at USG. The Priddy Library offers, among other things, eight group study rooms, individual study carrels, a reading room, and a study lounge. Students can borrow USG's One Button Studio, a simplified and portable video production studio that allows them to record high-quality presentations, lectures, and videos without needing to know how to use the lights, projector, and camera. The Priddy Library also has two mobile Media:Scapes. These are large monitors on wheels that allow students to connect up to four different devices, increasing the number of ways to collaborate and share more information when studying or working on group projects. The Equil Smartmarker is another popular technology item available for checkout at the Priddy Library. It works with any whiteboard and allows users to save their notes and doodles onto their phone, tablet, or laptop, and then share it as a PDF file for others to see. It is also possible to stream it live. The library also has 50 iPads, six laptops, and five digital audio recorders available for checkout in addition to 44 desktop computers throughout the library.

Other Universitywide learning resources include the Writing Center, which provides one-on-one consultations at any stage of the writing process and academic coaching, which provides students the opportunity to work with a professional coach regarding academic-related goals, concerns, and stressors. (For a full list of Universitywide services, please see Standard 9: Student Support Services.)

Each school also provides learning resources for its students (see table below). For example, the schools of Medicine and Nursing jointly operate a patient simulation facility. Standardized patients are used in all four years of the medicine curriculum, including interviewing in Year I, support for physical diagnosis in Year II, teaching on required clerkships in Year III, and the required multi-station Objective Structured Clinical Examinations (OSCE) in the fall of Year IV, which is a requirement for successful completion of medical school. Physical therapy students also use the standardized patient facility. Similarly, the Clinical Simulation Labs in the School of Nursing provide more than 134 beds in 24 contemporary clinical simulation settings, in which undergraduate and graduate students learn and enhance their skills using intelligent mannequins and clinical simulators.

SCHOOL-BASED LEARNING RESOURCES

School of Dentistry

- Mannequins
- Clinical Simulation Laboratory
- Dental chairs

Carey School of Law

- Thurgood Marshall Law Library
- Computer labs

School of Medicine

- Medscope
- Multidisciplinary labs
- Patient Simulation Facility

School of Nursing

- Clinical Simulation Labs
- Clinical Education and Evaluation Laboratory
- Computer labs
- Media Center

School of Pharmacy

- Basic science lab
- Compounding lab
- Pharmacy practice lab
- Distance Learning Center
- Computer lab

School of Social Work

- Computer lab
- Media Center

117

TRANSFER POLICIES

Policies on transfer credit are established in the schools in accordance with UMB's central policy. Please see the discussion of transfer credit in Standard 8: Student Admissions and Retention for more detail.

ASSESSMENT OF PROGRAM OUTCOMES

The chief indicator that program outcomes are being met is each degree program's continuing accreditation. To maintain accreditation, programs must demonstrate to their respective accrediting bodies that they are achieving their goals. All of the University's professional programs have full accreditation status, and all of its graduate programs have passed MHEC's initial program review process and undergo periodic internal and external review in accordance with USM policy. None of the University's programs are on probation.

Another important source of assessment information comes from the individual courses within the programs. This course-level information, which includes grades and course evaluations, directly informs how programs' curricula are maintained and revised. Course-level assessment data is discussed in more detail in Standard 14: Assessment of Student Learning.

Apart from accreditation and course-level information, the University also uses other measures to assess program outcomes, including employment rates, licensure exam passing rates, and exit surveys.

The schools and the University monitor postgraduation employment rates to ensure that their programs adequately prepare students for success in their chosen fields. For example, the School of Medicine reported a 94 percent match rate for its 2015 graduates. In the School of Nursing, employment rates were self-reported as 93 percent for the BSN and 100 percent for the DNP. In the School of Dentistry, graduates reported at near 100 percent for DDS and at 100 percent for dental hygiene. This data is used cautiously, since many who are un- or under-employed are less likely to respond to the surveys that collect this data. For example, of the 156 graduates from the School of Pharmacy in 2014, only 72 completed the survey. Of these respondents, 100 percent were either employed or in a residency.

Many programs at UMB require students to pass licensure examinations. Student success rates in licensure examinations are monitored and are critically examined in relation to the demands of the curriculum and the clinical experiences available to every student. Passing rates are provided in the table on the next page.

Graduation and exit surveys also provide the schools with rich assessment information. For instance, upon completing a program in the School of Nursing, graduates fill out a 56-item Program Assessment Questionnaire (PAQ), which assesses five aspects of program satisfaction:

- 1. program utility and efficacy
- 2. learning resources
- 3. time efficiency and student demands
- 4. faculty-student relationships
- 5. curricular options and utility

Two global questions assess overall satisfaction with the program and willingness to recommend it to other potential students.

118

CLOSING THE LOOP

The schools assess whether their programs are achieving their stated goals by reviewing accreditation standards, course evaluations, post-graduation employment rates, licensure exam scores, exit surveys, and other data, such as workforce evaluations, alumni surveys, and focus group responses. In each school, this work is accomplished by a faculty-led curriculum committee, under the direction of the deans of academic affairs. If program goals are not being met, these committees alter the curriculum based on the assessment data.

Since most of these changes occur at the course level, curriculum committees review courses either annually or biennially. For examples of course-level changes, please see Standard 14: Assessment of Student Learning.

SUMMARY

Consistent with its mission, the University maintains an extensive portfolio of rigorous academic programs. Therefore, the University is in compliance with Standard 11: Educational Offerings.

LICENSING EXAMS RESULTS

PROGRAI	М	EXAM	FIRST-TIME TESTERS	NUMBER PASSING	PASSING RATE	NATIONAL PASSING RATE
School of	Dentistry					
DDS	2013	ADEX	114	113	99%	99%
	2014	ADEX	114	113	99%	100%
	2015	ADEX	126	123	98%	99%
Carey Sch	ool of Law	1				
JD	2012	Maryland Bar	262	213	81%	78%*
	2013	Maryland Bar	236	197	83%	81%*
	2014	Maryland Bar	232	181	78%	76%*
*Pass rate	for all Mar	yland Bar takers				
School of	Medicine					
MD	2013	USMLE Step 2 CK	156	155	99%	98%
	2014	USMLE Step 2 CK	156	155	99%	98%
	2015	USMLE Step 2 CK	150	146	97%	Not yet available
School of	Nursing					
BSN	2013	NCLEX	209	202	97%	87%
	2014	NCLEX	235	211	90%	83%
	2015	NCLEX	213	198	93%	83%
School of	Pharmacy					
PharmD	2012	NAPLEX	148	145	98%	97%
	2013	NAPLEX	158	152	96%	96%
	2014	NAPLEX	146	142	97%	95%
School of	Social Wo	rk				
MSW	2011	LGSW	312	278	89%	83%
	2012	LGSW	360	319	89%	84%
	2013	LGSW	332	298	90%	82%

STANDARD 12: GENERAL EDUCATION

119 STATEMENT OF THE STANDARD

The institution's curricula are designed so that students acquire and demonstrate college-level proficiency in general education and essential skills, including at least oral and written communication, scientific and quantitative reasoning, critical analysis and reasoning, and technological competency.

DECLARATION OF COMPLIANCE

As an institution of upper-division, graduate, and professional programs, UMB does not provide general education. Its three baccalaureate programs—nursing, dental hygiene, and medical and research technology—accept general and essential skills education as provided by the institutions from which students transfer. These transfers are conducted in accordance with negotiated and publicized articulation agreements. List of articulation agreements. Therefore, the University is in compliance with Standard 12: General Education.

STANDARD 13: RELATED EDUCATIONAL ACTIVITIES

120 STATEMENT OF THE STANDARD

The institution's programs or activities that are characterized by particular content, focus, location, mode of delivery, or sponsorship meet appropriate standards.

DECLARATION OF COMPLIANCE

UMB's related educational activities are consistent with its mission and goals and meet the same standards as its core educational offerings.

Due to its nature as a graduate and professional institution, UMB offers no precollege-level basic skills or developmental courses as part of its educational offerings. UMB does not admit unprepared students; however, it does have systems in place to ensure the success of struggling students.

UMB does not offer non-credit courses, and it does not give credit for experiential learning/skills obtained outside of a higher education setting. The University does not contract out any aspect of its educational experience to affiliated providers.

CERTIFICATE PROGRAMS

UMB currently has 10 certificate programs open to admission. All certificate programs are developed and approved within each school's rigorous curriculum approval processes to ensure that they have appropriate curricular sequencing with clear requirements, objectives and expectations. Once approved by the schools, proposed certificate programs then are vetted and approved by the University to ensure they meet the mission of the institution. An additional layer of scrutiny is conducted by the state of Maryland's Higher Education Commission (MHEC) for all certificate programs that require 12 or more semester hours at the master's level. Students in the certificate programs have access to all school and campus support services. The certificate programs are not applicable to a degree program whereby students who have completed the certificate would then apply with an eye toward transferring in credits.

BRANCH CAMPUSES, ADDITIONAL LOCATIONS, AND OTHER INSTRUCTIONAL SITES

UMB has no branch campuses. The University has two additional locations. The Universities at Shady Grove (USG) is a USM regional higher education center in Rockville, Md., and it provides instructional space for courses and programs from nine USM institutions. Our schools of pharmacy, social work, and nursing offer full degree programs at USG. The University also offers a master's program in law at the additional location of the University of Maryland, College Park (UMCP).

The University also has two instructional sites: the Laurel College Center and the College of Southern Maryland La Plata campus. The School of Nursing offers RN to BSN in the standard classroom format at these two sites.

The existence of the two additional locations and the two other instructional sites factor in to each year's budgeting process at UMB and undergo periodic assessment to ensure that their continuation is consistent with UMB's institutional mission and goals.

The additional location programs in pharmacy and nursing meet the same standards for admission, progression, curricula, and faculty as programs delivered on UMB's campus. UMB's two libraries, the Health Sciences/Human Services Library (HS/HSL) and the Thurgood Marshall Law Library, support students at both additional locations. Additionally, USG has the Shannon and Michael Priddy Library, the Center for Academic Success, the Center for Counseling and Consultation, the Office of Student Services, as well as a variety of community service opportunities. The Masters in Law students have access to all of the services at UMCP as that program arose out of the UMB/UMCP MPower initiative. (For more details on MPower see "MPowering the State" in the Introduction.)

121

DISTANCE EDUCATION, DISTRIBUTED LEARNING, AND CORRESPONDENCE EDUCATION

Most UMB schools and programs offer content delivered through distance-learning modalities: the Internet, television, video-conferencing, or other means. (UMB does not offer Distributed Learning or Correspondence Education.)

Programmatic distance education at UMB originated at the School of Nursing (SON), to improve educational access while maintaining high academic standards and rigor. Delivering graduate professional instruction online requires comprehensive planning; including instructional design support, faculty training, student readiness assessment and mentoring, attention to academic policy and procedure to achieve parity between face to face and online instruction. The SON initially received grant funds to build such an infrastructure, and UMB has since expanded its number of online and distance education programs due to the success of that model. The Quality Matters (QM) framework was chosen as a course design methodology due to its grounding in pedagogical research. All courses of the Doctorate of Nursing Program achieved QM distinction. Currently all online or web enhanced instruction at the SON, School of Pharmacy, and Graduate School is supported by the QM design process.

To support growth in distance education, UMB provides central institutional support to all schools through membership with the Southern Regional Education Board (SREB), provides a centralized state authorization process to ensure conformance with legal requirements, maintains robust digital resources through HS/HSL, and established a Center for Academic Innovation and Distance Education (AIDE) to foster student and faculty preparedness for distance education. The AIDE Center offers individual consultations, mentoring for new faculty, and workshops to inform about current research on teaching and learning.

UMB uses Blackboard as its learning management system and the University has a single sign-on authentication to access the Blackboard learning management system, UMB's online portal for grades, financial aid and billing (SURFS) and other campus technologies. Students utilizing online systems must use their secure UMID and UM Password each time they log in and all email communications are sent to the UMB student email account. Additionally, UMB has adopted and implemented an Information Technology Acceptable Use Policy that applies to all students and in all programs of study and covers students who attend in-class instruction as well as those who take distance education and hybrid classes. Students taking classes online are asked to complete an online orientation and strategies to maintain academic integrity in the academic environment are included in faculty training.

In addition to central institutional support, individual school departments, policies and procedures at the School of Nursing, School of Pharmacy, and the Graduate School support and articulate with clarity how faculty will be appointed and programs and courses regardless of delivery format will be approved to assure achievement of expected program learning outcomes, meet expectations for instructional rigor, parity of outcomes regardless of delivery format, monitor student success and progression through a robust program review process. At each school offering distance education; initial faculty orientation and training is required to teach online, a formal and informal course review structure based on the Quality Matters rubric exists, course evaluations, student performance and faculty input guide ongoing support to foster continuous improvement as UMB works collectively toward educational excellence.

122 ONLINE COURSE INSTRUCTION IN EACH OF UMB'S SCHOOLS

	STRUCTION IN EACH OF UMB'S SCHOOLS
School	Method of Instruction - Entirely Online Courses
School of Dentistry	None
Carey School of Law	The law school will be expanding its online master's offerings using the iLaw platform
School of Medicine	None
School of Nursing	RN-BSN
	Masters Health Services, Leadership, and Management
	Masters Nursing Informatics
	Nursing Informatics Certificate
	Teaching in Nursing and Health Professions Certificate
	Doctor of Nursing Practice
School of Pharmacy	Master of Pharmacometrics
	 Basic Pharmacometric Tools Basic PKPD Modeling Statistics for Pharmacometricians I Dose-Response Trials Strategic Communication and Negotiations PKPD Modeling I PKPD Modeling II Statistics for Pharacometricians II Special Topics (Project) Master of Regulatory Science Drug, Biologic, and Devise Regulation Drug and Biologics Discovery Drug and Biologics Development Clinical Research Regulated Products in the Marketplace
School of Social Work	None
Graduate School	Master of Science in Health Sciences
	 Intro to Writing & Library Sciences Ethics & Population Health Principles of Biostatistics Principles of Epidemiology Social & Behavioral Public Health Communication & Leadership Patient Outcomes Research Research Seminar I & II Intro to Health System Mgmt. Capstone Project

Continued on next page

ONLINE COURSE INSTRUCTION IN EACH OF UMB'S SCHOOLS CONT.

School

123

Method of Instruction - Entirely Online Courses

Graduate School

Certificate in Research Ethics

- · Intro to Research Ethics
- International Research Ethics
- Intro to Ethical Theory
- Institutional Review Boards
- RCR in International Affairs
- Ethics of Globalization

Certificate in Applied Thanatology

- · Interdisciplinary Issues
- Death & Dying: Ethical & Legal
- Palliative Care & Bereavement

To assure adequacy of technical, physical plant facilities, human resources, and learning resources to achieve the University mission and vision of a sustainable distance education program, the institution relies upon the Academic Affairs Advisory Committee, which includes representation from all schools and central administration to perform periodic assessments of the impact of technology on education, inform decision-making, budgeting, and resource allocation. With the comprehensive approach described above UMB is poised to be a leader in preparing, producing, and promoting quality distance education

faculty and learning opportunities to benefit our students, faculty, and partners to improve access to care, quality of care, and the health of our communities here and abroad.

SUMMARY

UMB delivers high-quality education in its certificate programs, its courses at additional locations and instructional sites, and its distance education offerings. Therefore, the University is in compliance with Standard 13: Related Educational Activities.

STANDARD 14: ASSESSMENT OF STUDENT LEARNING

124 **DEFINITION**

Assessment of student learning demonstrates that, at graduation, or other appropriate points, the institution's students have knowledge, skills, and competencies consistent with institutional and appropriate higher education goals.

DECLARATION OF COMPLIANCE

Student learning at the University focuses on specific learning outcomes derived from each program's accrediting body. These outcomes are assessed at multiple levels, and the University uses this data to ensure continuing student success.

CULTURE OF ASSESSMENT AND IMPROVEMENT

UMB prides itself on the success of its graduates and alumni. In each program and school the institutional mission and vision is reflected. The University articulates its mission-driven definitions of success for learners by publishing learner outcomes that are measured by a variety of assessments, each designed to evaluate professionalism, knowledge, skill acquisition, and the achievement of expectations. The institution supports an innovative culture of assessment; in graduate level education UMB has moved away from memorization and simple "drill and grill" assessment methodology. Instead, it has developed a robust culture of formative and summative assessment embracing the use of rubrics to evaluate writing, projects, and presentations. UMB uses portfolios to examine advancement toward publication, research grant acquisition, and scholarly contribution. Simulation and Standardized Patient resources are used to create environments for rich authentic assessments where UMB can teach and test its students' preparedness to work in teams, meet the challenges of a complex health care environment, while protecting individual safety and the well-being of the patients they will serve.

All of UMB's professional schools are accredited, most rank nationally, and its students are successful in gaining employment, postgraduate admission to residency, funding of research, and publication of scholarly work. In addition to Middle States accreditation, most programs at UMB participate in their own self-study processes as part of their national professional organizations. Each school develops outcomes assessment measures and collects information and feedback relevant to their specialty accrediting body. This process assures that UMB's graduates in professional programs are imparted with the knowledge, skills, and competencies necessary for the next stage of their training and/or employment.

President Perman has regular performance meetings with the deans of each school in which they discuss student performance. Additionally, the Office of Institutional Research and Accountability (OIRA) reports student performance to USM in its Managing for Results report. (See Standard 7: Institutional Assessment.) The University also produces specialized reports, such as the UMB Achievement Gap Report, which examines the difference in graduation rates in the BSN program between minority and white students and between African-American and white students.

OVERVIEW OF THE ASSESSMENT OF STUDENT LEARNING

UMB and its schools engage in continuous outcomes assessment and analyses. These efforts are accomplished at multiple levels including at the course, program, school, and institutional level. As seen in previous chapters, UMB is a learning organization with structures, policies, and procedures in place to create a culture of quality improvement to foster student success. The feedback and data used by the University to meet the requirements of multiple accrediting bodies is used to improve existing programs

125

and inform robust multi-year strategic planning and implementation efforts.

The institution stays engaged and informed of the progress of all schools, programs, and credentials through a robust assessment and central reporting structure. This reporting structure facilitates compliance with required state and USM system reporting while informing the leadership of the state of the institution. ORIA reports annually on student applications, degrees and financial aid awards, and faculty and staff employment and demographics. The office also reports each term on credits earned, cumulative GPAs, course section information, student registration, enrollment, and course outcome information.

This information is reviewed, analyzed, and used to determine if there are educational areas of risk or in need of additional resources or support. Programs showing delays in graduation, increased attrition, or poor certification-licensing performance issues are prioritized to receive additional resources and attention. Information collected and synthesized by the University is often reported out through the University's Managing for Results and Performance Accountability Reports.

Student learning outcomes on campus often emerge from professional competencies. These learning outcomes include specific knowledge, skills, and attitudes UMB graduates must demonstrate as they progress through professional programs and degrees. Curriculum committees map desired competencies, skills, and knowledge to course curricula. Mapping ensures effectively sequenced instruction and links assessment to student learning outcomes. Progression committees evaluate student advancement and use knowledge, skill, and 360-degree professional observational assessments to assure learning outcomes are met at the acceptable criterion. In addition to using knowledge, skills, and professional observation

to inform student progression this information also is critically appraised to inform curricular changes to achieve the University's institutional mission of excellence in education.

Each individual health professional school on campus defines course-level and program-level student learning outcomes. These measurable learning outcomes are framed by each discipline's professional education association and are affirmed by each professional accreditation body. UMB recognizes that professional school accreditation is an ongoing and continuous process rather than a periodic event. To support its schools in successful professional accreditation the institution provides extensive resources for faculty instructional support and development. Many schools have an Office of Instructional Support that assists faculty with learning outcome assessment design, implementation, and analysis.

METHODS OF ASSESSING STUDENT LEARNING

The University's programs use a variety of methods to assess student learning outcomes including examinations, clinical assessments, self-evaluations, and alumni data. Additionally, faculty members also evaluate progress to identify and help struggling students.

Examinations

Programs use examinations to assess student knowledge as it pertains to course-level and program-level student learning outcomes. Some of these exams are created by faculty, and others are national normed standardized products. Within the School of Medicine, the MD program uses multiple-choice exams to provide immediate feedback to students. The Carey School of Law relies heavily on exams with open-ended questions for almost all of its didactic courses. Schools also use oral exams to evaluate analytical skills of students. Narrative assessment, peer assessment, and research assessment are commonly used tools for evaluating student knowledge and learning

126

outcomes among all of UMB's schools. Licensing examinations are also often used to assess the overall effectiveness of curricula in professional programs.

Clinical Assessments

Given the nature of UMB's programs, a considerable portion of student learning takes place in clinical settings, and this learning also is assessed. In many schools, students are evaluated along attitudinal and professionalism lines within both classroom and clinical activities. Various degree programs also use clinical performance ratings, narrative assessment, oral patient presentation, peer assessment, and research experiences. Programs are devised to assure educational equivalency with virtual patients provided to meet these needs. Faculty development includes instruction on the development of assessment tools.

Self-Evaluation

UMB also requires students to evaluate their own learning. Graduating DDS students self-evaluate their preparedness for practice in relation to the Maryland Dental Competency Statements through the mandatory senior exit survey. The results of this survey are reviewed by administrators and members of the Predoctoral Directors Committee and analyses become a formal part of the curriculum evaluation feedback loop. In alternating years, surveys are sent to dental and dental hygiene program alumni who graduated in the previous year and to directors of educational programs in which Maryland dental graduates have enrolled. Survey items are structured to assess the level of knowledge, skills, and competencies developed during the educational program. Data from these questionnaires are supplemented by surveys administered one year after graduation to School of Dentistry graduates, who selfappraise their knowledge, skills, and level of competence, once they have begun clinical

practice. The results of these supplemental surveys also provide additional information for ongoing programmatic review.

Alumni Data

Alumni survey data also are used to inform student outcomes, and includes information about how well the graduates, as well as the employers of graduates, evaluate the preparation of students for the performance/ practice expectations for the respective degree. In the School of Nursing, these surveys are administered every three years and longitudinal summary data are used to track trends and make recommendations on program content, structure, and learning activities. At the School of Nursing, major stakeholder data also are collected through annual meetings that include nursing leaders across practice settings where students have completed clinical learning and also those who hire new graduates.

Faculty Evaluation of Student Progression

Faculty in each of UMB's schools review assessment data to identify struggling students. For instance, School of Dentistry faculty members carefully monitor the performance of dental and dental hygiene students in the didactic, laboratory, and clinical components of the educational program at Student Progression Committee meetings. Members of the Preclinical Progression Committee and the Clinical Progression Committee review overall dental student performance during Years I and II, and Years III and IV, respectively. Members of the Dental Hygiene Progression Committee review all dental hygiene student performance. The committees meet six times annually to assess student performance in courses (internal assessments), as well as performance against standardized tests, such as the National Board Dental Hygiene Examination Parts I and II (external assessments).

127

SCHOOL REVIEW OF STUDENT LEARNING ASSESSMENT PROCESS

The following table summarizes the curriculum review process for each of UMB's seven schools

and is followed by a detailed accounting of school curricula, student learning outcomes assessment methods, and examples of courselevel improvements in each of UMB's schools:

CURRICULAR REVIEW PROCESS AT THE COURSE LEVEL FOR EACH OF UMB'S SCHOOLS

School	Entities Responsible	Tools	Frequency
Dentistry	Academic DepartmentsAssociate Dean of Academic AffairsDirector of Instructional Evaluation	Course evaluations Senior exit surveys	Biennially
Law	Associate Dean of Academic Affairs Curriculum Committee	Course evaluationsBar passing rates	Annually
Medicine	Curriculum Coordinating Committee Office of Medical Education	 Internal exam rates Shelf exam rates Licensing exam rates Placement rates Course evaluations Focus groups 	Annually
Nursing	Curriculum CommitteeAssociate DeansCourse Coordinators	 Syllabi review Licensing exam rates Certification pass rates Course evaluations Clinical/lab evaluations Alumni survey Program reviews 	BSN Annually Others Biennially
Pharmacy	Curriculum Committee Graduate Studies Committee	Annual satisfaction surveyCourse evaluationsLicensure exam scores	Initially and After Substantial Changes
Social Work	 Master's Program Committee Clinical Concentration Committee Macro Concentration Committee Specialization Committees 	Syllabi reviewWorkforce analysesCourse evaluationsGraduating student surveyCouncil on SW competencies	Annually
Graduate	Program Curriculum Committee	Course evaluations Instructor input	Annually

SCHOOL OF DENTISTRY STUDENT LEARNING ASSESSMENT

Degree Programs and Student Learning Outcomes

The School of Dentistry (SOD) offers the Doctor of Dental Surgery program, Bachelor of Science in Dental Hygiene program, and Advanced Dental Education (certificate) programs. Programs at the PhD level are

offered in Biomedical Sciences and Oral and Experimental Pathology. The Dental, Advanced Dental Education, and Dental Hygiene programs are accredited by the Commission on Dental Accreditation (CODA) of the American Dental Association (ADA), and each program will be evaluated for re-accreditation by CODA in 2018. The Advanced Dental Education Program in Oral and Maxillofacial Surgery will be reviewed for reaccreditation in 2016.

128

The dental curricula are designed with student learning outcomes to meet the current Commission on Dental Accreditation standards. Samples of student learning outcomes for both the Doctor of Dental Surgery and Bachelor of Dental Hygiene are presented below:

Doctor of Dental Surgery

- Evaluate and assess emerging trends, technologies, and products in health care; and integrate best research outcomes with clinical expertise and patient values for evidence-based practice
- Utilize critical thinking and scientific knowledge in decision-making processes involved in patient care
- Utilize and apply ethical and legal reasoning in the provision of dental care
- Practice within the scope of competency and know how to refer to professional colleagues indicated
- Communicate effectively with other professionals regarding the care of patients
- Utilize principles of behavioral sciences for maintaining patients' oral health
- Communicate with a diverse population of patients
- Evaluate effectiveness of prevention, maintenance, and reparative therapies through assessment of treatment outcomes
- A full list of student learning outcomes is available at: http://www.dental.umaryland.edu/ media/sod/academic-affairs/Competenciesand-Competency-Examinations 2014.pdf

Bachelor of Dental Hygiene

- Provide education in a broader perspective
- Develop future leaders and educators in dental hygiene and the dental profession in general
- Provide quality comprehensive and ethical dental hygiene care to individuals of all means and backgrounds

- Possess the capabilities to provide ethical, evidence-based, state-of-the-art care in a dynamic health care environment
- Contribute to the growth, development, and professionalism of dental hygiene as espoused in the ADHA Code of Ethics through personal professional development and lifelong learning
- Promote optimal oral health and its relationship to general health among diverse population groups
- Utilize a pragmatic process of care protocol when offering health care programs or services to individual and diverse population groups while facilitating access to care and services
- Develop high-level technological skills for use in professional, clinical, and didactic environments
- A full list of student learning outcomes is available at: http://www.dental.umaryland.edu/ dentalhygiene/program-goals-and-objectives/

In addition to the student learning outcomes described above, statements of expected competence, known as the Maryland Dental Competencies, have been developed by School of Dentistry faculty. Taken together, the Maryland Competencies reflect the desired synthesis of student learning outcomes of the biomedical, behavioral, and clinical curriculum of the School of Dentistry. Prior to graduation, predoctoral dental students are expected to demonstrate that they have attained the required knowledge, skills, and values by passing each of the 55 standardized Maryland Competency Exams. These exams may be casebased reports, demonstrations, oral or written exams, or presentations, and are formal didactic and practical examinations administered as part of the curriculum. Performance on the Maryland Competency Exams is tracked to monitor student readiness and to evaluate the effectiveness of the curriculum in preparing students for independent practice.

129

Processes and Methods for Student Learning Outcome Assessment

The School of Dentistry has robust student learning outcome assessment that leads to course and curriculum improvement. Every course in the dental curriculum is reviewed in alternate years. Departments assume primary responsibility for these reviews. Each course review takes into consideration student evaluations, course director reflections, advances in science, advances in educational technologies, and peer review. Course reviews also consider the number of hours devoted to standardized topics compared with national averages for those topics (reported in the annual ADA Survey of Dental Education Group IV-Curriculum). After departmental review, and if revisions are proposed, course directors consult with the associate dean of academic affairs, the director of instructional evaluation. and the Predoctoral Curriculum Committee regarding the need for proposals to eliminate, reduce, add, or re-sequence curriculum content; to familiarize students with new technologies; and/or to add evidence-based treatment modalities. Requests for new courses, changes to hours/credits, modifications to scheduling, and/or changes to the overall curriculum are reviewed by the Predoctoral Curriculum Committee and subsequently reviewed and approved by the Faculty Assembly.

Moreover, School of Dentistry faculty have a central role in the assessment of student learning outcomes. The faculty carefully monitor the performance of dental and dental hygiene students in the didactic, laboratory, and clinical components of the educational program at Student Progression Committee meetings. Members of the Preclinical Progression Committee and the Clinical

Progression Committee review overall dental student performance during Years I and II, and Years III and IV, respectively. Members of the Dental Hygiene Progression Committee review all dental hygiene student performance. The committees meet six times annually to assess student performance in courses (internal assessments), as well as performance against standardized tests, such as the National Dental Board Examinations Parts I and II (external assessments). To supplement this review process during the clinical years, course directors and clinical directors use information from the Clinical Dashboard to assess clinical competence, patient management, and attendance during required block rotations.

Students must pass national standardized licensure exams as a condition for graduation and licensure, and regional standardized licensure examinations as a condition of licensure (see below). Student success rates in licensure examinations are monitored over time and are critically examined in relation to the demands of the curriculum and the clinical experiences available to every student.

Illustrations of Course-Level Assessment and Improvement

Examples of how student learning outcome assessment has resulted in course-level improvement are plentiful in the School of Dentistry. For instance, the course Principles and Practice of Clinical Endodontics (ENDO 521) was reviewed by the Department of Endodontics, Prosthodontics and Operative Dentistry and needed improvements were identified. The primary student learning objectives of the course are to develop competency in performing endodontic therapy and diagnosis and management of the endodontic patient.

130

The student learning outcome assessment revealed that students were learning principles for restoring endodontically treated teeth prior to receiving the foundation knowledge of endodontic treatment. This finding led to an intra-departmental formation of a committee charged with re-sequencing learning outcomes. The committee

elected to move the Principles and Practice of Clinical Endodontics so that it would precede a course focused on Fixed Prosthodontics beginning in the fall semester of 2015. The re-sequencing of this course resulted in improved student feedback in the course illustrated in the following table:

RESULTS OF PRE- AND POST-INTERVENTION STUDENT SURVEYS

ASSESSMENT QUESTIONS (ENDO 521)	RES	ULTS
	Pre-Intervention Spring 2015	Post-Intervention Fall 2015
Course Management	Very good = 38.5% Good = 56.4%	Very good = 64.3% Good = 30.9%
Correlation between teaching and assessment	Very good = 43.6% Good = 41.0%	Very good = 80.9% Good = 19.1%
Available laboratory time	Very good = 43.6% Good = 51.3%	Very good = 66.7% Good = 26.2%
Educational value of lab assignments	Very good = 58.9% Good = 41.3%	Very good = 73.8% Good = 26.2%
Overall rating of the course	Very good = 41.0% Good = 58.9%	Very good = 61.9% Good = 33.3%

In addition to student learning outcomes assessment the School of Dentistry closely monitors licensure examination passing rates. In order to practice dentistry, dental students must successfully complete a licensure examination. The licensure examination administered at the School of Dentistry is the ADEX (American Board of Dental Examiners) examination administered by the Northeast Regional Board (NERB). This examination consists of five sections that include a Computer-Based Diagnostic Skills Examination (DSE), an Endodontic Clinical Examination,

a Fixed Prosthodontic Clinical Examination, a Periodontal/Scaling Clinical Examination, and a Restorative Clinical Examination. At graduation, May 2014, the UMB students at the School of Dentistry achieved a pass rate in each examination section as listed in the table below:

SOD EXAMINATION PASS RATES

Examination	Passing Rate
Computer-based diagnostic skills	98.4%
Periodontal/Scaling clinical	98.4%
Restorative clinical	97.6%
Fixed prosthodontic clinical	100%
Endodontic clinical	100%

131

CAREY SCHOOL OF LAW STUDENT LEARNING ASSESSMENT

Degree Programs and Student Learning Outcomes

The Francis King Carey School of Law offers three degree programs: Juris Doctor (JD), Master of Laws (LLM), and Master of Science in Law (MSL). In 2010, the JD program was reaccredited until 2017 by the American Bar Association. The American Bar Association has also granted acquiescence status to the LLM and the MSL programs. The curricula in the Carey School of Law are designed to meet the competencies and learning outcomes set by these accrediting bodies. Samples of these learning outcomes are presented below:

Juris Doctor

- Understand the basic concepts of constitutional law that govern the relationship between individuals and the state, including limits on government action, the Due Process and Equal Protection Clauses of the 14th Amendment, and the power of the court to remedy constitutional violations
- Master legal research skills, methodologies and strategies to ensure performance of thorough legal research, including federal and state law, legislation, regulations, agency decisions, electronic databases, and other primary and secondary materials
- Have produced a substantial piece of written work that shows awareness of pertinent primary and secondary authority, and demonstrates original thoughtful analysis through completion of the Advanced Writing Requirement
- Understand how the law operates in practice through a clinical law course including having direct professional contact with or substantial responsibility for providing legal assistance to those who otherwise lack access to justice in the legal system or to organizations acting on behalf of such persons

- Have developed "skills for the admission to the bar and for effective, ethical, and responsible participation as members of the legal profession" as required by the American Bar Association Standard 301(a)
- The Carey School of Law does not currently have a list of student outcomes posted on its website. Its accrediting body, the American Bar Association, expects schools to comply with the newly established obligation to provide learning outcomes and assessment of student learning on or before fall 2016

Master of Science in Law

- An ability to recognize and understand the legal regimes and structures that regulate or otherwise affect their professional roles
- A capacity to read and understand legal documents, including contracts, judicial opinions, statutes, regulations, executive orders, legislative commentaries, and legal opinion letters
- An ability to identify legal context for effectuating policy, and thus to recognize and better appreciate the legal risks that may affect decisionmaking in public and private organizations
- An understanding of major modes of dispute avoidance and resolution, including negotiation, private settlement, mediation, arbitration, and litigation
- A full list of learning outcomes in the Master of Science in Law is available at: https://www.law. umaryland.edu/academics/msl/curriculum.html

Master of Laws

- The Master of Laws provides advanced legal education for lawyers seeking to develop expertise or more specific areas of study or who would like to survey a broader range of topics.
- Students are required to specialize in an area
 of established expertise at the Carey School
 of Law, ensuring they will develop expertise
 in their field of choice, including: Business
 Law, Clinical Law, Constitutional Law, Crisis
 Management, Cybersecurity, Environmental
 Law, Health Law, Intellectual Property Law, and
 International and Comparative Law.

132

Processes and Methods for Student Learning Outcome Assessment

Curricular review and assessment of student learning outcomes is managed by a number of entities within the Carey School of Law. The school's Office of Registration and Enrollment reviews student records on a regular basis to track student completion of graduation requirements. The Administrative Committee establishes academic support policies that apply to students who fall below certain grade point averages after their first year. Additionally, each year the dean of the law school appoints a Curriculum Committee and its chair. Then the dean, with the advice of the chair, provides the committee with its charge for the year. Included in that charge is always an instruction to evaluate and accept or deny new/proposed courses for the degree programs. The committee also evaluates initiatives to enhance or alter the existing curriculum for the degree programs and brings them to the Faculty Council for approval.

Faculty in the Carey School of Law also have a significant role in the assessment of student learning outcomes. The faculty review GPAs to identify struggling students in first and second years. First-year students who complete the first semester and are ranked in the bottom 20 percent of the class are strongly encouraged to take the spring elective Legal Profession/Reasoning and Rhetoric, a course that uses substantive learning as foundation for working on academic skills like reading and briefing cases, time management, class participation, outlining, and exam skills. A special emphasis is placed on developing and reinforcing the ability to apply substantive law effectively in a time examination setting. First semester first-year students who have a GPA below 2.0 are required to take the spring elective Legal Profession/Reasoning and Rhetoric. Additionally, students who finish their first semester of law school with a GPA below 1.5 are placed on academic probation and must meet with the associate dean for students and student services

for academic and other counseling immediately upon receiving first semester grades. Students who, upon completion of their entire first year have performed in the lowest 20 percent – based on cumulative grade point averages – are strongly encouraged to take Commercial Law/Reasoning & Rhetoric II or its equivalent. In addition, a student will be required to take Commercial Law/ Reasoning & Rhetoric II or its equivalent if the student (i) was ranked in the lowest 20 percent of the class at the conclusion of the fall semester of the first year, (ii) did not take Legal Profession/ Reasoning & Rhetoric or its equivalent during the spring semester of the first year, and (iii) is ranked in the lowest 10 percent of the class at the conclusion of the spring semester of the first year.

Illustrations of Course-Level Assessment and Improvement

The Carey School of Law routinely makes course-level improvements based on student learning outcome assessment. For example, the course Bar Essay Writing, which focuses on the skill of writing bar examination essays including standard essays and performance tests, was recently reviewed. Student evaluations revealed that the course did not include sufficient substantive reinforcement. In other words, the course lacked an underpinning in the law, which made writing the standard essay difficult, since writing good answers depends on mastery of substantive law. Additionally, it was determined that the absence of work on multiple choice testing, a significant component of the bar exam, further limited the students' ability to learn and master substantive law. Based on these assessment findings, changes were made to the course. First, content was added to the course in two areas: 1) Contracts and torts in order to impart skills of memorization and substantive mastery to aid in the writing of essays; and 2) Students must now learn the law, memorize and master it, and apply the law they have mastered on subject-relevant essay questions. In addition to these changes to improve substantive mastery

133

and bar exam preparation, multiple-choice questioning has been added to the course. The multiple-choice questioning was designed to give students opportunities to practice identifying subtle nuances of the law, a needed skill for the bar examination. Teaching now focuses on the process of reading through questions, identification of nuances, and application of the law to correctly answer questions. The course is currently being reviewed to measure the impact of these changes on student learning.

As a result of robust student learning outcomes assessment, UMB graduates of the Carey School of Law have consistently had higher pass rates on the Maryland Bar Examination than other first-time takers. Over the period of 2011-2013, the pass rates on the Maryland exam for first-time takers averaged 80 percent. For the same period, the pass rate for UMB graduates taking the exam for the first time was just over 84 percent.

SCHOOL OF MEDICINE STUDENT LEARNING ASSESSMENT

Degree Programs and Student Learning Outcomes

The School of Medicine offers a Doctor of Medicine, a Master of Genetic Counseling, a Master of Public Health, a Master of Pathology Assistance, and a Doctor of Physical Therapy. The school also offers a bachelor's degree in Medical and Research Technology. All programs are currently fully accredited and have student learning outcomes and objectives in accordance with their respective accrediting bodies and informed by national standards. Within each degree program, the overall program goals provide the basis for the curriculum and courselevel learning outcomes supporting each degree. The student learning outcomes address the knowledge, skills, and attitudes for successful entry into the next phase of the student's career. Samples of student learning outcomes are presented below for selected degree programs in the School of Medicine:

Doctor of Medicine

The overall educational objectives of the Doctor of Medicine program are:

- To provide a safe, welcoming, and respectful learning environment for all persons regardless of race, gender, creed, national origin, age, disability, or sexual orientation
- To educate students intensively and broadly in the cultural, clinical, and scientific aspects of medicine
- To prepare students to engage in a lifetime of learning
- To achieve a high level of professional competence and social awareness
- To provide opportunities for students at every level of training to pursue areas of special interest for intellectual stimulation and/or career advancement
- To encourage the development of highly competent primary care physicians, clinical specialists, and scholars in basic and clinical research, teaching and academic administration

After the first and second years of the curriculum students will be able to:

- Demonstrate in the context of clinical medicine a mastery of ethics, human behavior, sexuality, nutrition, interviewing and diagnosis, doctorpatient relationship
- Demonstrate the ability to formulate a scientific hypothesis, describe the methods and procedures used to test the hypothesis, perform the background work that will form the basis of their project, and write a final report describing their work
- Demonstrate a comprehensive understanding of the morphological and developmental organization of the human body with emphasis on the interdependence of structure and function in tissues and organs of the body
- Demonstrate an understanding of biological molecules and their interactions through a mastery of the fundamentals of biochemistry, cell biology, molecular biology, and human genetics from an integrated multi-disciplinary perspective. Further, students will understand the importance of cell biology in the illumination of the causes of, as well as the strategies for, the treatment of diseases.

134

- Demonstrate an understanding of the fundamental principles of pathology, epidemiology, and pharmacology crucial for mastering concepts of systems-based pathophysiology and treatment of disease
- Demonstrate an understanding of the pathophysiological nature of disease as an aberration of normal physiology and responsiveness, and its treatment. Students will understand the epidemiology, pathophysiologic mechanisms, pathology, clinical presentation, diagnostic evaluation, and therapeutic intervention of important clinical disease states.
- A full list of student learning outcomes in the first year of the curriculum can be found at: http://medschool.umaryland.edu/osa/ handbook/Preclinical_Year1.asp and for the second year of the curriculum at http://medschool.umaryland.edu/osa/ handbook/Preclinical_Year2.asp

After the third and fourth years of the curriculum students will be able to:

- Assume progressive responsibility for patient care and mastery of clinical performance in the following specialty areas: family medicine, internal medicine, surgery, surgical subspecialties, pediatrics, psychiatry, neurology, obstetrics and gynecology
- Demonstrate ability to take on increasing responsibility demanded by specialty residency training programs throughout the country
- Demonstrate independent thinking and clinical decision-making during internship rotations in which the student is expected to deliver supervised direct patient care
- Demonstrate an ability to improve health in underserved areas through participation in a monthlong placement at an Area Health Education Center in Maryland
- A full list of student learning outcomes in the third and fourth years can be found at: http:// medschool.umaryland.edu/osa/handbook/ Year3_4.asp, http://medschool.umaryland. edu/osa/handbook/Year3.asp, and http:// medschool.umaryland.edu/osa/handbook/ Year4.asp

Doctor of Physical Therapy

- Integrate evidence and demonstrate critical thinking to support clinical decision-making as measured by successful completion of three PICO projects, achievement of entry-level clinical reasoning, and successful completion of written case report
- Screen, examine, evaluate, diagnose, and provide appropriate interventions for client/ patient management across the life span as measured by successful completion of the requirements for clinical education
- Communicate effectively, orally, and in writing, with patients' families and health care providers as measured by the successful completion of the Clinical Internship
- Function as an entry-level independent point of entry provider of physical rehabilitation and rehabilitation services as measured by a firsttime passage rate of 90 percent or higher.
- Effectively manage care for persons in medically complex, rehabilitation, and community-based settings as measured by graduate and employer outcome surveys
- A full list of student learning outcomes for the Doctor of Physical Therapy program can be found at: http://pt.umaryland.edu/pros_dpt.asp

Bachelor's in Medical and Research Technology

- Produce high-quality and timely work to support value-added laboratory services
- Develop technical skills to organize time, materials, and equipment to perform procedures efficiently
- Apply knowledge of testing principles and limitations to basic troubleshooting
- Apply adequate knowledge of technology involved in the clinical laboratory
- Evaluate published literature as it applies to the profession
- Analyze procedures using sound judgment before attempting to undertake them, requesting assistance when necessary
- Actively participate in performing assigned duties with attention to accuracy and cost efficiency
- A full list of student learning outcomes can be found at: http://www.medschool.umaryland. edu/dmrt/goals.asp

Processes and Methods for Student Learning Outcome Assessment

All courses at the School of Medicine are designed around a combination of lecture, small group, seminar discussion, laboratory exercise, and, where indicated, clinical and practical experience. The Doctor of Medicine curriculum is based on approximately half lecture and half small group activity during the first and second years of study. Clinical experiences are part of all professional degrees throughout the curriculum. In addition to lecture and small group activities, students utilize standardized patients. Similarly, the Doctor of Physical Therapy program uses a combination of didactic instruction and clinical placements with close faculty supervision. Simulation, online learning (synchronous and asynchronous), and clinical instruction is a part of all programs. In addition to didactic instruction, the Medical and Research Technology program emphasizes clinical skill acquisition while the other graduate programs are lecture-, seminar-, and laboratorybased throughout. Students across all programs have robust opportunities for research.

Assessment of course-level student learning outcomes is managed by pertinent faculty committees. Each program is periodically reviewed internally as well as prepared for external accreditation processes. Measures such as performance compared to past group of students and performance on external national examinations is common to all of the professional degree offerings. There is an extensive system of soliciting, analyzing, and utilizing student feedback for program and course improvement. This feedback includes formal anonymous evaluations of each course and clerkship that are required of students and submitted electronically at the end of each educational unit. Formal assessment is supplemented with focus groups of students from individual sections and courses, meetings of class officers with the dean, and active student representation on all education committees. The Office of Medical Education

collects, analyzes, and prepares reports on student feedback and provides this information to course and clinical clerkship directors. Student feedback is an extremely important tool for assessing student learning outcomes in courses and clerkships. When courses demonstrate a need for improvement the School of Medicine has the expectation that corrections be made quickly and that such improvements are iterative over time.

Aside from changes within the curricula and courses being initiated by direct student feedback, faculty and national educational groups associated with the individual degree programs also drive student learning outcomes improvement. For instance, the Curriculum Coordinating Committee of the Doctor of Medicine degree program reviews accreditation standards to make sure the curriculum is in compliance. Clinical faculty provides feedback through their academic department related to the educational program and coursework. Curriculum and student learning outcomes within other School of Medicine degree programs is evaluated using performance on national examinations, placement into post-degree training, and career outcomes as guideposts. Importantly, faculty have a rich menu of development programs including opportunities to improve teaching and assessment skills.

Illustrations of Course-Level Assessment and Improvement

The School of Medicine routinely makes course-level improvements based on student learning outcome assessment. For example, as a result of assessment, student learning outcomes have become largely competency based, spanning knowledge, skills, and attitudes. Knowledge is assessed by the use of examinations developed by faculty as well as national normed standardized products. In the Doctor of Medicine program, for instance, these are primarily multiple-choice format with immediate feedback to students. Other programs rely more heavily on problem solving and open-ended format examinations.

136

Oral assessment is used throughout all programs to evaluate analytical skills of students. Students in all professional programs promptly receive examination results to allow maximal improvement of performance. Where applicable, narrative assessment, peer assessment, and research assessment are used. Additionally, assessments have resulting in the monitoring of student attitudes from the onset of program throughout to completion. Students are evaluated along attitudinal and professionalism lines within both classroom and clinical activities. Various degree programs also use clinical performance ratings, narrative assessment, oral patient presentation, peer assessment, and research experiences. Programs are devised to assure educational equivalency with virtual patients provided to meet these needs.

In the Medical Research and Technology degree program, the department annually reviews Board of Certification scores, both students overall pass rate and the mean of student content sub-scores. If sub-scores fall below the national mean. the content area is given to Advisory Board members for review and recommendation for change. For example, the sub-score for "Proteins and Other Nitrogen Containing Compounds" was slightly below the national average. This content is addressed in Clinical Chemistry (MEDT 452), which is a senior-level course that presents in-depth information relating to the pathophysiology of commonly measured analytes in the clinical chemistry laboratory. Recommendations for improvements were made and the modified content was delivered in MEDT 452 Clinical Chemistry in fall 2014. Six examples of content change include:

 CK-MB, Total CK and myoglobin should be mentioned in context of medical lab science for historical reasons and to give a full picture of cardiac markers – perhaps a timeline addressing cardiac marker advances

- 2. As an MI marker, LDH has replaced CK-MB, which has been replaced by cTnT
- Content in the BNP/NT-pro BNP section should be expanded and supplemented with additional detail and application
- 4. Add free light chain as endpoint for Amyloidosis
- 5. Add a section on Qualitative IgG, IgM, IgA measurement such as nephelometry and free (serum & urine) light chain measurements
- 6. Add limitations of eGFR

The 2014 sub-score in "Proteins and Other Nitrogen Containing Compounds" before the content changes were 424 and the national mean was 511. After the improvements to the course were made, the 2015 sub-score was 514 and the national mean was 512. Clearly, the course improvements lead to quantifiable improvement in student learning and performance.

A final illustration of course-level improvement based on student learning outcome assessment can be found in the Master of Genetic Counseling program. The research component of the program is a robust learning experience for the students. Historically, the final project for the research component, students were required to submit a traditional bound thesis project. The program had a high level of thesis abstracts accepted for poster presentation at national meetings, and one student went on to modify and publish data from her thesis in manuscript format in a medical journal. Course evaluations from students, alumni surveys, and curriculum review with faculty concluded that the research course and final project needed to be updated to align with other genetic counseling program research outcomes. In 2014, the course Research for Genetic Counselors (HGEN 703) was reorganized and the final project was modified to be a publication ready manuscript in journal format. Since these modifications occurred three students (out of seven eligible) have published journal articles, and course evaluation feedback suggests that students see the utility and relevance of the new format.

137

Due to the School of Medicine's diligence in the assessment of student learning outcomes, UMB's students perform at or above national benchmarks. For instance, in the Bachelor of Science in Medical and Research Technology UMB's students have passed the national certification exam at the rate of 95.8 percent, 94.1 percent, and 100 percent for 2013, 2014, and 2015, respectively (compared to national rates of 84.5 percent, 83.8 percent, and 80.3 percent over the same time period). Likewise, the Doctor of Physical Therapy program achieves extraordinarily high outcomes with graduation rates of 96.5 percent, 96.5 percent, and 95.3 percent for 2013, 2014, and 2015, respectively. Additionally, physical therapy licensure rates were 100 percent in 2013 and 2014, and 98.4 percent in 2015 with 100 percent of graduates employed within six months of passing their licensure examination. Finally, in the Doctor of Medicine program, UMB medical students had USMLE Step 2 CK passing rates of 99 percent for both 2013 and 2014 and 97 percent for 2015.

SCHOOL OF NURSING STUDENT LEARNING ASSESSMENT

Degree Programs and Student Learning Outcomes

The School of Nursing offers two entry programs into professional practice; a traditional Bachelor of Science in Nursing (BSN) program and the Clinical Nurse Leader (CNL) program, which is an entry-level master's option. There is a Registered Nurse to Bachelors of Science in Nursing option that allows nurses prepared in associate degree or diploma programs to pursue the bachelor's. Both the traditional bachelor's and Registered Nurse to Bachelor options are offered at the Universities at Shady Grove location, with the faculty collaborating to provide comparable quality and rigor across the courses. In addition to the Clinical Nurse Leader entry option, there are three other master's options (Health Services Leadership and Management, Informatics, and Community Public Health Nursing). The school offers two doctoral programs, the Doctor of Philosophy and the Doctor of Nursing Practice. The program outcomes for each program are based upon the Commission on Collegiate Nursing Education essentials for the respective programs, as well as other professional nursing and higher education standards. Samples of student learning outcomes are presented below for selected degree programs in the School of Nursing:

Bachelor of Science in Nursing

- Combine theoretical knowledge from the sciences, humanities, and nursing as a foundation to professional nursing practice that focuses on health promotion and prevention of disease for individuals, families, communities, and populations
- Use the nursing process to manage care for individuals, families, communities, and populations integrating physical, psychological, social, cultural, spiritual, and environmental considerations
- Use the research process through translation of evidence-based findings to advance professional nursing and the delivery of health care
- Incorporate information management and patient care technology in the delivery of quality patient-centered care
- Integrate knowledge of health care policy from social, economic, political, legislative, and professional perspectives to influence the delivery of care to individuals, families, communities, and populations
- Employ interprofessional communication and collaboration to ensure safe, quality care across the life span
- Use principles of ethics, legal responsibility, and accountability to guide professional nursing practices across the life span and across the health care continuum
- Accept personal accountability for lifelong learning, professional growth, and commitment to the advancement of the profession
- A full list of student learning outcome is available at: http://www.nursing.umaryland. edu/academics/undergrad/bsn/

138

Master of Science in Nursing

- Incorporate scientific inquiry and theoretical concepts into efforts to improve the care to individuals and communities
- Lead evidence-based and interprofessional approaches for the design and delivery of comprehensive, culturally competent care to individuals, families, communities, and populations
- Participate in the design, implementation, and evaluation of health care systems to foster safety and excellence in health care delivery
- Engage in ethically sound, culturally sensitive, and evidence-based practices to promote the health of individuals and communities
- Commit to lifelong learning for self and promote lifelong learning to consumers
- Practice advanced nursing roles in collaborative relationships across disciplines and in partnership with communities
- A full list of learning outcomes is available at: http://www.nursing.umaryland.edu/academics/ grad/ms/

Doctor of Nursing Practice

- Initiate, facilitate, and participate in collaborative efforts that influence health care outcomes with scholars, practitioners, clinicians, and policymakers from other disciplines
- Lead at the highest educational, clinical, and executive ranks
- Evaluate and apply ethically sound, culturally sensitive, evidence-based practice for the improvement of education, clinical practice, systems management, and nursing leadership
- Analyze and apply scientific knowledge and related skills for the highest level of nursing practice
- Design, implement, manage, and evaluate patient care and organizational systems
- A full list of learning outcomes is available at: http://www.nursing.umaryland.edu/academics/ doctoral/dnp/

Processes and Methods for Student Learning Outcome Assessment

In September 2014, the school underwent a successful site visit by the Commission on Collegiate Nursing Education. Entrylevel courses are reviewed annually by the curriculum committee and course directors. Graduate-level courses are conducted every three years. PhD courses are reviewed periodically. Students complete online end of semester Course Evaluation Questionnaire and Faculty Evaluation Questionnaire for each course taken. These data are reviewed by course faculty and under the direction of the course director, course revisions are made as needed. Course directors and program directors review Course Evaluation Questionnaire data each semester and modifications to courses are made as needed.

The School of Nursing has a Master Evaluation Plan (available in the School of Nursing Self-Study) that provides the overarching process for program evaluation, and collects data from students and faculty including Course Evaluation Questionnaires, Faculty Evaluation Questionnaires, Peer and Supervisor evaluation, and Program Assessment Questionnaire (completed upon program completion). Additionally, in both the BSN and CNL options, standardized testing across the curriculum was implemented in 2000 to benchmark to students in similar programs. In summer of 2014, this integrated testing process was started with Kaplan, Inc. Administered at the end of specific clinical courses, and based upon individual student performance, a remediation plan is developed to support student performance. Aggregate data from these tests also are used to evaluate and inform curricular changes.

139

Illustrations of Course-Level Assessment and Improvement

The School of Nursing routinely makes courselevel improvements based on student learning outcome assessment. For example, a Bachelor of Science course titled Fundamentals of Nursing in the Context of Older Adults (NURS 317) was recently reviewed. The course introduces students to the application of clinical practice in the development of cognitive, psychomotor, communication, and therapeutic skills necessary to address common needs and responses of older adults across the health care continuum. In the course, students have the opportunity to practice their psychomotor, assessment, and therapeutic communication skills in the simulation laboratory as well as in a variety of clinical environments with older adults. In fall 2014 students noted on the Course Evaluation Questionnaires that they felt there was a "disconnect" between the simulation laboratory and didactic portions of the course. During the winter break of 2015, revisions were made to better align and sequence didactic material with skills practices in the laboratory. The course director also increased direct involvement in the laboratory and clinical components of the course. Additionally, student quizzes were modified to include laboratory and didactic questions, decreasing knowledge-based questions, and increasing application-based questions. Qualitative results of student evaluations of the course in spring of 2016 indicated improvement. Students were specifically positive about the quizzes and their value to students in preparing for midterm and final examinations.

The School of Nursing also recently reviewed the course Populations at Risk (NURS 761) in the Master of Science program. The course is largely didactic and focuses on the mission of public health and the various organizations that support the responsibilities of public health at the international, national, and local levels. The course explores family systems as well as support and risk communications

that influence public health and populations at risk. The course also examines factors that influence the effectiveness of health promotion and disease prevention programs. Students reported in course evaluations that critical topics in the course were being taught too late in the curriculum. Subsequently, the course was moved to the fall semester, which is earlier in the curriculum. Faculty members also advised students to enroll in the course in the first or second semester of their program. Orientation sessions for new students incorporated the change and encouraged students to take the course early in their program. New students reported being more enthusiastic about the community and public health specialty and subsequently, nearly all students took the course early in their program of study.

The School of Nursing's focus on assessing student learning outcomes has resulted in not only improvement in course evaluations but also in relation to certification examinations. Key outcome indicators monitored in relation to student outcomes in the Master and Doctor of Nursing Practice programs include certification examination pass rates for graduates. Aggregate data are compared annually to trend data and benchmark, when available, to state and national standards. The Program Assessment Questionnaire (PAQ) is completed by all graduating students and assesses five aspects of program satisfaction, including program utility and efficacy, curricular options and individualization, time efficiency and student demands, faculty-student relationships, and learning resources. Program outcomes for the master's and doctoral specialties are reflected in the certification rates of graduates. For example, graduates of the nurse anesthesia graduate specialty are eligible to sit for the national certification examination offered by the American Association of Nurse Anesthetists. In 2013, 100 percent of UMB students who took the certification exam passed within two attempts,

140

with 90 percent passing on the first attempt. Moreover, the CCNE accreditation document for evaluation and outcomes measurements details the School of Nursing's favorable outcome metrics. Entry-level student 2013 NCLEX pass rates, for first-time test takers, was 96.65 percent (above the state and national pass levels) as compared to 85.86 percent of all test takers in Maryland.

SCHOOL OF PHARMACY STUDENT LEARNING ASSESSMENT

Degree Programs and Student Learning Outcomes

The School of Pharmacy offers the four-year Doctor of Pharmacy program (PharmD), and four graduate programs, two leading to the PhD Pharmaceutical Science and Pharmaceutical Health Services Research, and three leading to the MS in Pharmaceutical Sciences, Regulatory Science, and Pharmacometrics. The oversight for student learning outcomes assessment for these programs is managed by a schoolwide Curriculum Committee, consisting of faculty and student representatives. This committee oversees all curricular changes and evaluates changes to be considered by the faculty. The committee provides recommendations for all major course additions, deletions, and revisions. Substantial curricular changes are reviewed by the Curriculum Committee, forwarded to the Executive Council, and approved by the School's Faculty Assembly. Graduate-level courses and programs are reviewed by the School's Graduate Studies and Research Committee and forwarded to the Graduate School Council for approval. The Curriculum Committee also meets annually with the Assessment Committee to review the education goals of the school's strategic plan, discuss data, and review evidence of progress toward the goals.

General Abilities and Terminal Performance Outcomes have been created for the Doctor of Pharmacy degree in accordance with the standards of the Accreditation Council for Pharmacy Education. Both the General Abilities and the Terminal Performance Outcomes inform course-level student learning outcomes, which define the knowledge, skills, and abilities that the successful learning is expected to achieve by the end of the course. The school's assistant dean of academic affairs is responsible for overall assessment activities in collaboration with the standing committees and administrative committees. These entities help to ensure effective assessment of student learning outcomes. A sample of outcomes for the Doctor of Pharmacy degree are listed below:

- Participate in the development of patientspecific therapeutic plans
- Select the appropriate dosage form, formulation, route of drug administration, and or/drug delivery system
- Provide drug products to patients
- Use technology effectively to carry out professional functions
- Prepare medications for patient use
- Educate patients regarding patient-specific therapeutic plans
- Administer drug products to patients
- Perform basic life-support measures and triage patients
- Maximize appropriate drug use behaviors
- Participate in the process of monitoring patient outcomes
- Answer patient-specific questions
- Identify payment sources and mechanisms for professional services and products
- Participate in quality assurance processes related to drug use
- Participate in health education
- Participate in health policy decision-making processes related to drug use
- Maintain professional competence
- A full list of General Abilities and Terminal Performance Outcomes is available in the course catalog at: http://www.pharmacy. umaryland.edu/media/SOP/attachments/ 2011.pdf

141

Processes and Methods for Student Learning Outcome Assessment

A variety of assessment measures and methods are used to evaluate student learning and achievement, both in aggregate and at the individual student level. This includes an annual student satisfaction survey that affords an opportunity to get feedback on student learning; results are provided in aggregate to class year and campus cohorts as they progress through the curriculum. Additionally, student learning outcomes are evaluated in both a formative and summative manner via a variety of methods in the curriculum. Each semester, the Office of Academic Affairs provides to faculty course managers, department chairs, and education department vice chairs the summary data and students' comments from course evaluations on course structure, content, administration, and instructors, along with summary data on student performance derived from Blackboard course sites and Banner. Finally, the National American Pharmacist Licensure Examination and the Maryland Multistate Pharmacy Jurisprudence Examination scores represent the most basic measurement of curriculum effectiveness. Nearly all graduating students sign a waiver enabling the National Associate of Boards of Pharmacy to release their identified scores to the school, which can then be compared to admission data, course grades, OSCE and APPE performance, and final GPA. Graduates of the School of Pharmacy take the North American Pharmacist Licensure Examination, as well as a law exam in the state where the graduate is applying for a license for those states that require it. The School of Pharmacy passing rate for the year 2014 was 97.3 percent.

Illustrations of Course-Level Assessment and Improvement

Examples of how student learning outcome assessment has resulted in course-level improvement are abundant in the School of Pharmacy. For instance, the Abilities Lab is a series of six courses that occur each semester during the first three years of the curriculum designed to introduce and reinforce contemporary pharmacy practice skills and drug knowledge skills. The sequence includes Objective Structured Clinical Examinations, quizzes, high-stakes practical examinations, and written exams to assess knowledge retention of self-paced study. The School of Pharmacy has used students' formative feedback to incorporate course modifications and a variety of new courses that were not emphasized prior to experiential rotations. Although many didactic courses rely on multiple-choice examinations, there has been a concerted effort to increase the number and variety of alternative assessment methods. Changes have been made to include open-ended case-based questions, debates, and practical skills examinations. Many courses have incorporated lower-stakes quizzes and audience response questions into lecture that allow students to receive formative feedback about content mastery before the summative exam. These changes have enhanced the ability of the faculty to track and assess development of skills over time. The results of these efforts are evident in improved rotation and licensing exam preparedness.

Course improvements also have been undertaken in the School of Pharmacy's master's and doctoral programs. For instance, the online Regulatory Science program has been in existence for two years, but has already benefited from student learning outcome review through the Quality Matters program, an international organization representing broad

142

inter-institutional collaboration and a shared understanding of online course quality. Based on the Quality Matters certification and feedback, courses have been adjusted to allow for building an online student community through increased student- and teacher-initiated interactions. Courses in the PhD program in Pharmaceutical Sciences also have evolved as a result of student learning outcome assessment. The program's courses were reviewed by an external panel of experts and based on their analysis of student feedback two new courses in biostatistics and ethics were added to the curriculum. Additionally, a required course in Principles of Drug Discovery and Development was streamlined into two separate modular courses to accommodate changing student career needs.

SCHOOL OF SOCIAL WORK STUDENT LEARNING ASSESSMENT

Degree Programs and Student Learning Outcomes

The School of Social Work offers three degrees. The Bachelor of Science in Social Work taught at the University of Maryland, Baltimore County, the Master of Social Work, and the Doctor of Philosophy in Social Work. Samples of student learning outcomes are presented below for selected degree programs in the School of Social Work:

Master of Social Work

Students are prepared:

- For advanced practice with individuals, families, groups, organizations, communities, and society
- For advanced practice in a method of concentration and an area of specialization
- To practice in a manner that reflects the principles underlying the Social Work Code of Ethics and the National Association of Social Workers
- To practice effectively with, and on behalf of, systems and people of diverse backgrounds and needs

- To practice with, and on behalf of, vulnerable populations, populations-in-need, and oppressed populations
- To practice in a manner that promotes social and economic justice
- To practice utilizing a person-environment framework and a strengths perspective
- To appreciate the importance of continuing professional development and of contributing to the knowledge and skill base of the profession

Processes and Methods for Student Learning Outcomes Assessment

The School of Social Work program outcomes are based on Council for Social Work's Education (CSWE) Educational Policy and Accreditation Standards (EPAS). The EPAS describe four features of an integrated curriculum design: program mission and goals, explicit curriculum, implicit curriculum, and assessment. The 10 CSWE core competencies that all MSW students should demonstrate upon graduation from the UMB SSW include: identify as a professional social worker, apply ethical principles to guide professional practice, apply critical thinking, engage diversity and difference in practice, advance human rights and social and economic justice, engage in research-informed practice, apply knowledge of human behavior and social environment, apply policy practice to advance social well-being, respond to context, engage, assess, intervene, evaluate individuals, families, groups, organizations, and communities.

Individual competencies to be emphasized and measured are selected for each course and are based on the 10 core competencies. Students complete evaluations online at the end of every course. In addition, two dean's forums per year give additional venues for student feedback. The Master's Program Faculty Committee (MPC) conducts five student focus groups per year, and the dean, in his State of the School annual presentation to faculty and students, shares the results of the student evaluations.

143 Illustrations of Course-Level Assessment and Improvement

The School of Social Work makes course-level improvements based on student learning outcome assessment in a systematic and regular fashion. For example, the course Social Work Practice with Individuals (SOWK 630) in the Master of Social Work program was recently reviewed. This course provides students with foundation content on engaging, assessing, planning, intervening, and terminating with clients; along with frameworks for practice. Students also are introduced to crisis intervention and motivational interviewing. The Affordable Care Act of 2010 significantly expanded health coverage and integrated services in mental health, substance abuse, and primary care. In response to the new law, the School of Social Work commissioned research and a report to identify both opportunities and challenges for the Master of Science in Social Work curriculum. Among the recommendations in the report was to increase training content on standardized substance abuse screening instruments. The Clinical Concentration and the Behavioral Health Specialization Committee decided to infuse this new content into the SOWK 630 course. Specifically, screening, brief intervention, and referral to treatment training were added to the course. A total of 328 students received an online hybrid and in-class training as a component of the course. Although data analysis is currently taking place, preliminary findings suggest that course changes were well-received by students and they displayed marked improvement in knowledge, skills, and behavior related to the incorporation of screening, brief intervention, and referral to treatment content additions.

In another example of curriculum improvement, it was identified that students were not prepared to utilize theory in their dissertations in the Doctor of Philosophy in Social Work program. As a part of the review process, a former course was eliminated and replaced with Integrative Seminar (SOWK 812), which specifically focuses on

integrating theory and research. The new course examines the relationship between theory and research methods in the development of research questions and research design. The course reviews application of theory and theoretical frameworks, the difference between theoretical and conceptual frameworks, the difference between theories and logic models; various approaches to theory and research within interdisciplinary work; the connections between research and history, policy, and practice; and the role of ethics in both theoretical development and research design. Additionally, at the conclusion of the course students are expected to have an understanding of the proposal and dissertation process. The result of this improvement is that dissertation chairs and committee members report that students are now better prepared to use theory in their dissertations. Moreover, student course evaluations are consistently positive.

The school's focus on student learning outcomes has resulted in positive national exam and licensure pass rates. Graduating students take the standard Maryland State LGSW exam. In 2013, the first-time pass rate was 90 percent, 8 percent above the national average.

GRADUATE SCHOOL STUDENT LEARNING ASSESSMENT

Degree Programs

The Graduate School offers graduate education and training in biomedical, health, and human service sciences. The school offers 23 Maryland Higher Education Commission approved Master of Science (MS) and Doctor of Philosophy (PhD) degree programs, and three post-baccalaureate certificate programs in these areas of study. It also offers dual degrees with the University's professional schools including PhD/MD, PhD/PharmD, and PhD/DDS degree programs, and participates in inter-institutional studies in biochemistry, gerontology, and toxicology with other University System of Maryland campuses. Master's and doctoral studies have been offered on the UMB campus since 1917.

144

The Graduate School is organized into two divisions: 1) collaborative master's and PhD programs in association with UMB's other schools as described above, and 2) unaffiliated programs for which the Graduate School has exclusive responsibility for issues such as student learning outcomes. Currently, in the unaffiliated division the Graduate School operates the Master of Science in Health Sciences, Master of Medical Forensics, and three certificate programs in Research Ethics, Applied Thanatology, and Global Health Systems.

Graduate School Collaborative Division

In the collaborative division of the Graduate School, assessment of outcomes occurs within a framework of Academic Program Reviews. The annual program review for master's degrees and PhD degrees includes the extent to which the

program is advancing the state of the discipline, teaching effectiveness, and contribution to the mission of UMB. Additionally, experts in the field assess the programs quality and make recommendations on the specific aspects of how the program may be improved. At the time of the annual program review, UMB's assessment requires educational goals, learning outcomes, and program assessment plan that includes: 1) assessments and outcomes that are consistent with the review of program-level learning outcomes; 2) strengths and weaknesses of the program; and 3) changes made or proposed at the course and/or program levels to improve teaching and enhance student learning. The broad categories of student learning outcomes are listed below for each type of degree in the traditional division of the Graduate School:

STUDENT LEARNING OUTCOMES FOR MASTER'S AND PHD PROGRAMS IN THE COLLABORATIVE DIVISION

Master's Programs

- Students will demonstrate a depth and breadth of knowledge in the core areas of the discipline as established by the program faculty. Measures of Success: Performance on selected homework assignments and exam questions. Performance on comprehensive exam or portfolio (if applicable).
- Students will demonstrate a depth and breadth of knowledge in non-core areas within the discipline consistent with areas of focus established by the program faculty and the students' career goals. Measures of Success: Completion of a coherent set of courses and demonstration of knowledge on selected homework assignments, projects, and exam questions. May also demonstrate knowledge through thesis or comprehensive project.
- Students completing a thesis will demonstrate ability to conduct research using methodology accepted within the discipline. Measures of Success: Defense of thesis before a committee of faculty. Give some explanation of expectations for written document, oral presentation, and ability to answer questions on the research.

PhD Programs

- Students will demonstrate a depth and breadth of knowledge in the core areas of the discipline as established by the program faculty. Measures of Success: Performance on selected homework assignments and exam questions. Performance on comprehensive exam or portfolio.
- Students will demonstrate a depth and breadth of knowledge in non-core areas within the discipline consistent with areas of focus established by the program faculty and the students' career goals. Measures of Success: Completion of a coherent set of courses and demonstration of knowledge on selected homework assignments, projects, and exam questions. May also demonstrate knowledge through thesis or comprehensive project.
- Students will demonstrate ability to conduct research using methodology accepted within the discipline. Measures of Success: a) Defense of dissertation proposal before a committee of faculty. Give some explanation of expectations for written document, oral presentation and ability to answer questions on the research. b) Defense of final dissertation before a committee of faculty. Give some explanation of expectation for written document, oral presentation, and ability to answer questions on the research.
- Students will demonstrate knowledge and understanding of professional publication consistent with practices within the discipline. Students will disseminate research findings consistent with practices within the discipline.

145

Graduate School Unaffiliated Division

The flagship program in the unaffiliated division of the Graduate School is the Master of Science in Health Sciences program. The student learning outcomes associated with this program include:

- Prepare students to search, interpret, and evaluate the medical literature including interpretation of bio-statistical methods, access to common medical databases, and sampling methods
- Deliver instruction in health care delivery systems and health policy
- Provide an overview of health care system delivery, patient safety, quality and risk management
- Thoroughly review public health as it relates to the role of practicing clinician with regard to prevention of disease, maintenance of public health, and participating in disease surveillance, reporting and intervention; and
- Provide instruction in the principles and practice of medical and public health ethics

Processes and Methods for Student Learning Outcome Assessment

All courses designed in the unaffiliated division utilize Quality Matters (QM), a faculty-centered peer review process designed to certify the quality of online courses and online components. Program and course-level outcomes and instructional objectives for each course are all aligned with a comprehensive assessment strategy. Each instructional objective has linked assessment questions. After each exam, a qualitative and quantitative analysis is performed to evaluate individual and cohort performance. Additionally, mid- and post-course student surveys are used to make course improvements. These data are reviewed by the

curriculum committee for the program and the faculty make recommendations for course improvement and monitor implementation and continuing evaluation.

Illustration of Course-Level Assessment and Improvement

In addition to the routine course-level student learning assessments that occur in collaboration with UMB's six other schools, the Graduate School has robust assessment in the unaffiliated division of the Graduate School. For example, when Bio-statistical Methods (PREV 621) was offered online in the fall of 2014 it had not yet met all standards of the Quality Matters informal review, 17 out of 39 (43.5 percent) students failed the midterm exam, and issues with the statistical package led to significant confusion for students. Midcourse student evaluations during the initial offering of the course reflected concerns about the statistical package used in the course and the need for additional practice opportunities. The curriculum committee met and made recommendations for improvement to the course. Additional practice problems were added and the statistical package issues were resolved. Students performed much better on the final exam and only one student failed the class. Moreover, in post-course analysis, all Quality Matters issues were resolved, weekly practice, and quizzes were added as knowledge self-check for students and formative feedback for the instructor. Videos were redone with shorter length and attention to objectives and a new statistical package was used. At the midterm there were two exam failures as opposed to 17 the year prior with a similar class size of 45 students. The same final exam was used in both years and the final outcome was that no students failed the class.

146

INSTITUTIONAL ROLE IN SCHOOL-BASED STUDENT LEARNING ASSESSMENT

The culture of student learning assessment at UMB is vigorous and integrated at the institutional level, program level, and course level. At the institutional level, student learning outcomes reflect the extent to which UMB's mission, vision, and strategic goals are met in academic programs within the seven schools. Student learning assessment is an ongoing, institutional process, forging an ethos of assessment in which sufficient resources are devoted to the process. At the program level, student leaning outcomes address the extent to which the degree program is effective by

measuring competencies, knowledge, skills, and abilities. At the course level, student learning outcomes address the effectiveness of each individual course and are connected to program-level student learning outcomes.

SUMMARY

The University and its schools and programs regularly assess student learning and use this data to make informed adjustments to its courses and programs. Therefore, the University is in compliance with Standard 14: Assessment of Student Learning.