TECHNICAL STANDARDS

For Admission and Continuation for all programs except PhD:

As a health professions school that has contracts with a variety of clinical and community agencies, the GSN must consider the right of patients to safe and effective care in addition to the right of students to an education. The Technical Standards, adopted by the faculty and listed below, refer to the academic and clinical practice requirements that are *necessary for admission to, continuation in, and graduation from the programs of the GSN*. These requirements are essential for achieving the expected academic and clinical competencies of the curriculum. *Candidates who are offered admission to the GSN are required to acknowledge that they understand and meet these Technical Standards*.

Applicants and students (matriculating and non-matriculating) with questions about the Technical Standards are strongly encouraged to discuss the issue as soon as possible with the Associate Vice Chancellor for School Services; however, applicants are not required to disclose the nature of a disability at the time of application. Reasonable accommodations may only be granted with due process through the Office of School Services: www.umassmed.edu/schoolservices. Therefore, applicants and all students (matriculating and non-matriculating) are responsible for becoming informed about the services provided by that Office and the options that are available to them. Applicants to the GSN and all students should be aware that accommodations that may be reasonable for a classroom setting may not be reasonable for a clinical practice setting.

Reasonable accommodations are adjustments or modifications of course/program requirements that 1) do not fundamentally alter the nature of the course/program, and 2) do not compromise patient safety, health and well-being.

A student must possess aptitude, functional abilities and skills in the five areas listed below: 1) observation; 2) communication; 3) sensorimotor coordination and function; 4) intellectual-conceptual, integrative and quantitative abilities, and 5) professional, behavioral, and social attributes. Students must be able to perform independently in these areas.

Observation is the ability to accurately process visual, auditory, tactile and olfactory information in a meaningful way as part of a nursing assessment. Observation of patients often occurs in the midst of competing sensory stimuli; therefore, the student must be able to attend to and process stimuli appropriately, selectively, and quickly in spite of competing stimuli.

Sight includes (but is not limited to) the ability to: observe demonstrations in the classroom, including projected slides and overheads; read written, electronic and illustrated material; observe a patient accurately at a distance and close at hand, noting non-verbal signs of health, illness, disease, injury and disability; discriminate changes, such as color of fluids, skin, culture media, and reagent tests; detect and discriminate findings on x-rays and other imaging tests; discriminate numbers, patterns and other visual displays associated with instruments and tests used for diagnosis and treatment, such as sphygmomanometers, electrocardiograms, and infusion pumps, and with signaling devices, such as pagers and alarms; and discriminate anatomic structures using diagnostic instruments such as otoscopes, ophthalmoscopes and microscopes.

Hearing includes (but is not limited to) the ability to detect, process and distinguish: verbal and auditory information being presented in a classroom or lab; verbal and auditory information that others in the health care setting are communicating, such as patients, families, and other health professionals; auscultatory sounds using a stethoscope; sounds when palpating and percussing patients during assessment; auditory signals from instruments and tests used for diagnosis and treatment, such as infusion pumps, and from signaling devices, such as pagers and alarms; cries for help and other sounds indicating distress; verbal and auditory information being communicated over the telephone, intercoms, radio and other transmitting equipment; verbal and auditory information being communicated by persons wearing a mask.

Touch includes (but is not limited to) exteroceptive sense and proprioceptive sense, which means the ability to detect, process and distinguish weight, temperature, texture, shape, size, position, movement, pressure, vibration, rigidity and flow associated with the physical properties of anatomic structures and technical equipment. Students must be able to detect, process, and distinguish touch from patients, such as a hand grip to assess patient strength, and from equipment, such as a needle stick.

Smell includes (but is not limited to) the ability to detect, process, and distinguish: odors associated with disease processes, such as ketones on a patient's breath and purulent wound drainage; and odors associated with environmental gases and fires.

Communication

Communication is the ability to have meaningful and effective exchanges with patients, families, faculty and staff, and members of the interdisciplinary health care team through verbal, nonverbal, electronic and written means.

Students must be able to relate effectively and sensitively to patients, their family members and groups of patients, conveying a sense of compassion and empathy. This requires that students have the ability to listen, interpret, and offer meaningful and appropriate feedback in a timely and articulate manner. The ability to perceive, interpret and respond to non-verbal communication is also essential. This would include (but is not limited to) patients' emotional status, such as sadness, worry, agitation; mental status, including comprehension; and physical activity, gestures, and posture. Students must be able to communicate clearly with patients and their family members to elicit information, provide appropriate health teaching, and offer emotional support.

Students must be able to communicate quickly, effectively and efficiently in oral and written English with all members of the interdisciplinary health care team, the management of the health care delivery system, patients and their family members and the broader community. This would include (but is not limited to) the ability to: elicit a thorough history from patients; communicate complex findings in appropriate terms to patients, their family members, groups of patients, members of the interdisciplinary health care team and management; record observations and plans legibly, efficiently and accurately in documents, such as the patient record; prepare and communicate concise but complete summaries of individual clinical encounters and complex prolonged clinical encounters; complete forms according to directions in a timely fashion; make formal presentations for educational and/or clinical practice purposes.

Sensorimotor Coordination and Function

Gross and fine motor coordination and function includes (but is not limited to) the integration of sensory and motor information, hand-eye coordination and manual dexterity, as well as the ability to use the student's own body force to safely and effectively move, push, pull and lift patients and equipment, and to safely and effectively bend, reach, stretch, walk and/or run as needed to deliver patient care. Students must be able to respond promptly to urgent situations in the clinical setting, and must not hinder the ability of other health care professionals to provide prompt care. Usual clinical settings require that the student be able to carry and lift loads from the floor, from 12 inches from the floor, to shoulder height and overhead. This would involve occasionally lifting 50 pounds, frequently lifting 25 pounds, and constantly lifting 10 pounds.

Examples of the integration of sensory, gross and fine motor coordination and function include (but are not limited to) the ability to: perform a physical examination using palpation, auscultation, percussion, and other diagnostic maneuvers; perform laboratory tests and diagnostic and therapeutic procedures; perform cardiopulmonary resuscitation; administer medications through multiple routes; apply pressure to stop bleeding; open obstructed airways; insert

catheters, IV lines and other invasive means of accessing interior body cavities; suture uncomplicated wounds; remove and apply dressings; use technical, diagnostic, and monitoring equipment, such as, but not limited to computers, signaling devices, electronic record systems, infusion pumps, otoscopes, ophthalmoscopes, sphygmomanometers, and electrocardiograms; and measure angles and diameters of various body structures using tape measures.

Students must be able to transport themselves to a variety of clinical and community practice settings, including patient homes. Clinical practica, assistantships, internships and clerkships require prolonged standing in place, rapid ambulation, and stamina. Students will be in these settings during day, evening, and night shifts.

Students shall perform skills that require gross and fine motor coordination and function unassisted.

Intellectual-Conceptual, Integrative and Quantitative Abilities
These abilities include reading, measurement, calculation, reasoning, analysis, judgment, numerical recognition, and synthesis. Education for advanced nursing practice and leadership presents exceptional challenges in the volume and breadth of required reading and the necessity to impart relevant information to others. Students must be able to cognitively process, interpret and retain large amounts of information, delivered electronically, orally, in writing, and in graphs and charts—quickly and accurately, and often in urgent situations. Errors in any of these areas may seriously compromise patient care.

Students must be able to demonstrate critical thinking for the purposes of clinical judgment and scholarly inquiry and reasoning, as follows:

Critical thinking for the purposes of clinical judgment is an essential skill demanded of registered nurses, advanced practice nurses and nurse leaders. Sound clinical judgment reflects consistent and thoughtful deliberation in assessing patients; diagnosing health problems; and developing, implementing and evaluating a plan of care. It requires that students identify and interpret significant findings from history, physical examination and laboratory data; provide a reasoned explanation for likely diagnoses; and prescribe appropriate medications and therapy, often in urgent and time-limited situations, and on an ongoing basis. The ability to incorporate new information from members of the interdisciplinary health care team, families and patients, faculty and peers, and from the literature in formulating and revising diagnoses and plans is essential. Students must be able to identify and communicate the limits of their knowledge to others when appropriate.

Critical thinking for the purposes of scholarly inquiry and reasoning is an essential skill consistent with graduate study. Students must be able to read, interpret and synthesize the literature, including statistical analyses, and demonstrate command of essential concepts through scholarly papers, written for publication or distribution to professional and lay audiences; oral and poster presentations for professional and lay audiences; examinations; and application in clinical settings. They must be able to do so independently when expected so that their work reflects their own abilities. The student should have basic computer skills that include but are not limited to: document preparation, sending and receiving email with attachments, internet navigation, accessing databases that include the school library and the ability to access the internet with the required software to access and complete the required courses.