

# Northwestern Health Sciences University

## *Doctor of Chiropractic Program*

### Technical Standards for Matriculation, Promotion, and Graduation

#### GENERAL CONSIDERATIONS

Chiropractic education and practice requires that the accumulation of scientific knowledge be accompanied by the simultaneous development of specific behaviors, psychomotor and communication skills and competencies. Because Northwestern Health Sciences University, Doctor of Chiropractic Program (DCP) has a responsibility to society to graduate the best possible clinicians, all students must meet both our academic standards and our technical standards in order to matriculate, progress through, and graduate from the college. Our academic and technical standards are based on the “undifferentiated clinician” model to ensure capable, well-rounded future doctors of chiropractic.

*Academic Standards* refer to acceptable demonstrations of competency in various disciplines, before matriculation and after, as judged by faculty members, examinations, and other measurements of performance. Please refer to the NWHSU Student Handbook for detailed information about the DCP’s Academic Standards.

*Technical Standards* refer to the essential aptitudes and abilities that allow chiropractic students to perform in a modern healthcare environment in a variety of ways summarized by the areas of competency below.

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#### TECHNICAL STANDARDS FOR THE DOCTOR OF CHIROPRACTIC PROGRAM

Enrolled chiropractic students must possess the social attributes and general physical and mental health necessary for performing the duties of a chiropractic student and clinician-in-training without harming patients, other students, staff, and faculty with whom the student might have contact.

Students must be able to demonstrate capacities/abilities on their own, or with reasonable accommodations, in five broad areas: **perception/observation; communication; gross and fine motor coordination; cognition; professionalism.** Please see appendices for examples.

#### I. Perception/Observation – Vision, Hearing, Tactile and Proprioceptive Abilities

- A. Students must be able to physically participate in, perceive, comprehend and synthesize (by the use of senses and mental abilities) the presentation of information through:
- Large group lectures, small group discussions, presentations, demonstrations and laboratory experiments
  - One-on-one interactions
  - Patient encounters
  - Written, audiovisual and web-based materials
- B. The student must assess and comprehend the condition of all patients assigned to him or her for examination, diagnosis and treatment. Such observation and information acquisition usually requires the functional use of visual, auditory and somatic sensation.
- C. As chiropractic students need enhanced sensory skills, matriculants who are otherwise qualified but who have significant tactile, sensory or proprioceptive deficits would not be allowed to enter the DCP (or continue should they become impaired while students).

## **II. Communication – Speaking, Reading and Writing**

- A. Students must be able to communicate skillfully (in English) with faculty members, staff, other members of the healthcare team, patients, families, and other students, in order to:
- Elicit, convey and clarify information
  - Build rapport and develop therapeutic relationships
  - Demonstrate competencies
- B. The applicant/chiropractic student must be able to communicate effectively and sensitively with patients in order to elicit information, describe changes in mood, activity and posture, and assess nonverbal communications.
- C. Required communication skills include speaking, reading and writing, as well as the observation skills described above.

## **III. Gross and Fine Motor Coordination**

- A. Our core chiropractic techniques require that the students must possess fully functional upper and lower extremities; be able to stand upright with adequate coordination and stability; and, have sufficient mobility and body strength to proficiently apply manual chiropractic techniques.
- B. Students must have sufficient motor function and tactile ability meet the competencies required for graduation and to:
- Attend, and participate in all classes, groups, and activities which are part of the curriculum
  - Read and write

- Examine patients, perform diagnostic procedures and provide patient care
  - Do basic laboratory procedures and tests
  - Perform CPR
- C. The applicant/chiropractic student must have sufficient motor function to elicit information from patients by palpation, auscultation, percussion and other diagnostic maneuvers.
- D. Students must be capable of performing basic laboratory and clinical tests

#### **IV. Cognition – Conceptual, Integrative and Quantitative Abilities**

- A. The applicant/chiropractic student must be able to measure, calculate, reason, analyze and synthesize. Problem-solving, the critical skill demanded of clinicians, requires all of these intellectual abilities.
- B. The applicant/chiropractic student must be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures.
- C. The applicant/chiropractic student must have the capacity to perform these problem-solving skills in a timely fashion.
- D. Students must be able to demonstrate higher-level cognitive abilities, which include:
- Memory and recall
  - Rational thought and conceptualization
  - Measurement and calculation
  - Visual-spatial comprehension
  - Organization, analysis and synthesis
  - Representation (oral, written, diagrammatic, three-dimensional)
  - Clinical reasoning, ethical reasoning and sound judgment

#### **V. Professionalism, behavioral and social attributes**

- A. Students must be able to:
- Consistently display integrity, honesty, empathy, caring, fairness, respect for self and others, diligence, and dedication
  - Promptly complete all assignments and responsibilities attendant to the diagnosis and care of patients
  - Develop effective relationships, with patients, other students, faculty and other health care providers
  - Tolerate physically, emotionally, and mentally demanding workloads
  - Function effectively under stress, and proactively make use of available resources to help maintain both physical and mental health
  - Have direct physical contact in teaching and clinical situations with faculty, fellow students, patients and live models of both genders
  - Adapt to changing environments, display flexibility, and be able to learn in the age of uncertainty
  - Take responsibility for themselves and their behaviors

Any chiropractic school applicant or chiropractic student, who has a question about whether he or she can meet these standards due to the functional limitations from a disability, should contact the Office of Student Affairs for a confidential discussion.

### ACCOMMODATIONS

All requests for accommodations are considered on a case-by-case basis. Accommodations provide assistance to students to meet technical and/or academic standards, not to circumvent them.

Qualified students with documented disabilities are provided with reasonable accommodations in the DCP, which may include involvement of an intermediary or an auxiliary aid. However, should an impairment result in a request for an accommodation involving an auxiliary aid or intermediary that provides *cognitive support or knowledge, substitutes for essential clinical skills, or supplements clinical and ethical judgment*, it may be difficult for such requests to be granted without fundamentally altering the program. Thus, accommodations cannot eliminate essential program elements or fundamentally alter the chiropractic college curriculum.

For this reason, individuals with visual, auditory and/or physical impairments severe enough to require an intermediary cannot typically be accommodated in the DCP. An intermediary that would have to select and interpret visual (e.g., histology slides, diagnostic imaging, clinical presentations) and auditory information (e.g., heart sounds, lung sounds) would constitute cognitive support and/or a supplement to clinical judgment. This kind of assistance would also, undoubtedly, depend on healthcare/scientific knowledge to some extent. Use of this type of intermediary, in the faculty's opinion, would represent a fundamental alteration to the chiropractic program. Reliance on an intermediary trained to perform physical exams for a student with a severe physical disability would also be unacceptable for the same reasons.

## **APPENDICES**

*The examples below show how a standard may be applied in the DCP education/clinical programs. The examples listed are for illustrative purposes only, and not intended to be a complete list of all tasks in the DCP program.*

### **Appendix A**

#### **Examples of technical standards for perception/observation:**

Representative examples of materials/occasions requiring perceptual abilities include, but are not limited to: books, diagrams, discussions, physiologic demonstrations, microbiologic cultures, gross and microscopic studies of organisms and tissues, chemical reactions and representations, photographs, radiographs, cadaver dissections, live human case presentations, and patient interviews.

Additional examples include, but are not limited to: physical exams; rectal and pelvic exams; examinations with stethoscopes, otoscopes, fundoscopes, sphygmomanometers, and reflex hammers; verbal communication and non-verbal cues (as in taking a patient's history or working with a healthcare team); live and taped procedures; x-rays, MRIs, and other diagnostic findings; web-based lecture or other course content or activities.

### **Appendix B**

#### **Examples of technical standards for communication:**

Examples of areas in which skillful communication is required include, but are not limited to: answering oral and written exam questions, eliciting a complete history from a patient, presenting information in oral and written form to faculty and supervisors, participating in sometimes fast-paced small-group discussions/interactions, participating in group dissections, participating in pathology labs.

Additional examples of areas in which skillful communication is required include, but are not limited to: participating in clinical rounds and conferences; writing patient H&Ps (histories and physicals); making presentations (formal and informal) to colleagues, clinicians and other professionals; communicating daily with all members of the healthcare team; talking with patients and families about healthcare issues; making educational presentations to patients and families; participating in videotaped exercises; interacting with supervisors; writing notes and papers.

### **Appendix C**

#### **Examples of technical standards for gross and fine motor function:**

Examples of activities/situations requiring students' motor/tactile function include, but are not limited to: transporting themselves from location to location; being in physical attendance and participating in lectures, small groups, patient presentations, review sessions, dissections, laboratory work, and microscopic investigations; using a computer; performing a complete physical exam - including observation, auscultation, palpation, percussion, and other diagnostic maneuvers; performing simple lab tests; using light microscopes; performing cardiopulmonary resuscitation.

Additional examples of experiences requiring motor/tactile function include, but are not limited to: accompanying staff on rounds and conferences; performing venipunctures; performing physical, orthopedic, neurological, gynecological, pediatric (with the appropriate instruments); dealing with agitated patients in emergency situations; maintaining appropriate healthcare records; acting as assistant in clinical situations.

## **Appendix D**

### **Examples of technical standards for cognition**

Examples of applied cognitive abilities include, but are not limited to: understanding, synthesizing, and recalling material presented in classes, labs, small groups, patient interactions, and meetings with faculty; understanding 3-dimensional relationships, such as those demonstrated in the anatomy lab; successfully passing oral, written, and laboratory exams; understanding ethical issues related to the practice of chiropractic; engaging in problem solving, alone and in small groups; interpreting the results of patient examinations and diagnostic tests; analyzing complicated situations, and determining the appropriate sequence of events to effect successful treatment; working through problems.

Additional examples of required cognitive abilities include, but are not limited to: integrating historical, physical, social, and ancillary test data into differential diagnoses and treatment plans; understanding indications for various diagnostic tests and treatment modalities; understanding methods for various procedures; being able to think through healthcare issues and exhibit sound judgment in a variety of clinical settings, including emergency situations; making concise, cogent, and thorough presentations based on various kinds of data collection, including web-based research; knowing how to organize information, materials, and tasks in order to perform efficiently in clinic; understanding how to work and learn independently; understanding how to function effectively as part of a healthcare team.

## **Appendix E**

### **Examples of technical standards for professionalism**

Examples of professional behavior include, but are not limited to: showing up prepared and on time for clinic, lectures, conferences, and procedures; handing in assignments on time; refraining from plagiarizing or cheating; treating patients, faculty, staff, and other students with respect; making an effort to understand prejudices and preconceptions that might affect patient interactions or collegial relationships (especially in the areas of race and ethnicity, sexual orientation, gender, disability, age, and religious difference); developing successful working relationships with faculty, staff, and peers by accepting constructive feedback.

Additional examples of professional behavior include, but are not limited to: maintaining a professional demeanor in clinical situations (e.g., white coat, name tag, appropriate attire, neat appearance, respectful speech, sobriety); representing oneself accurately; appreciating and preserving patient confidentiality; responding sensitively to patients' social and psychological issues; developing empathic listening skills; understanding social biases and stigmas, and not reinforcing them; advocating for patients when appropriate; using college/clinic resources responsibly; getting advice when handling ethical dilemmas; taking constructive feedback from professors, and clinicians with open-mindedness and the intention to improve; contributing to the effectiveness, efficiency, and collegiality of healthcare teams.

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*Adapted from the AAMC Special Advisory Panel on Technical Standards for Medical School Admission.  
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