Minimal Technical Standards for Admission and Matriculation

A.T. Still University

Biomedical Sciences Program

Introduction

Biomedical Sciences (BMS) Program- A.T. Still University (ATSU – KCOM) is committed to equal access for all qualified applicants and students. Minimal Technical Standards for Admission and Matriculation (the "Standards") state expectations of BMS students. The Standards provide sufficient information to allow the candidate to make an informed decision for application. Minimal Technical Standards for Admission and Matriculation are a guide to accommodation of students with disabilities. Accommodations can be made for disabilities in some instances, but a BMS student must be able to perform in a reasonably independent manner. Procedures to apply for accommodations are found at the conclusion of this policy.

Statement of Inclusion

ATSU-KCOM admits and matriculates qualified Masters in Biomedical Sciences students. ATSU-KCOM prohibits discrimination against anyone on the basis of race, color, national origin, religion, sex, age, sexual preference or disability. ATSU-KCOM expects all applicants and students to meet certain minimal technical standards as set forth herein. The Standards reflect what the University believes are reasonable expectations of masters prepared professionals in learning and performing common biomedical science research and education.

Categories, Standards and Examples

A Masters in Biomedical Sciences graduate must have the knowledge and skills to function in a broad variety of laboratory situations and a wide spectrum of research, education, and leadership. In order to carry out the activities described below, students must be able to consistently, quickly, and accurately integrate, analyze, and synthesize data. Students must possess, at a minimum, the following abilities and skills: observation; communication; motor; sensory; strength and mobility; intellectual, conceptual, integrative and quantitative; and, behavioral and social. These abilities and skills comprise the categories of ATSU-KCOM Minimal Technical Standards for Admission and Matriculation and are defined below. Standards and examples appear in table format after the categories. The examples mentioned are not intended as a complete list of expectations, but only as samples demonstrating the associated standards.

1. Observation: Students must have sufficient vision to see demonstrations, experiments and laboratory exercises. Students must have adequate visual capabilities for proper evaluation and integration.

2. Communication: Students should be able to hear, see and speak to colleagues in order to elicit and acquire information. Students must also be able to communicate effectively in oral and written form with staff and faculty members and all members of the health team.

3. Motor: Motor demands include reasonable endurance, strength and precision. Students should have sufficient motor function to safely and accurately execute movements reasonably required for research, education, and laboratory work. Such movements require coordination of both gross and fine muscular activity, equilibrium, and functional use of the senses of touch and vision.

4. Sensory: Students need enhanced sensory skills including accuracy within specific tolerances and functional use for laboratory and classroom experiences. Students who are otherwise qualified but who have significant tactile sensory or proprioceptive disabilities must be evaluated medically. These disabilities include individuals who were injured by significant burns, have sensory motor deficits, cicatrix formation, or have malformations of the upper extremities.

5. Strength and mobility: Students must have sufficient posture, balance, flexibility, mobility, strength and endurance for standing, sitting and participating in the laboratory and classroom experiences.

6. Intellectual, conceptual, perceptual, integrative and quantitative: These abilities include reading, writing, measurement, calculation, reasoning, analysis, and synthesis. In addition, students should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures. Problem solving and reasoning, critical skill, demanded of researchers and educators, requires all of these intellectual abilities.

7. Behavioral and social: Students must possess the emotional health required for full utilization of their intellectual abilities, the exercise of good judgment, the prompt completion of responsibilities attendant to research, education, and leadership, and the development of mature, sensitive, and effective relationships. Students must be able to tolerate physically demanding workloads and to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties inherent in research, education, and leadership. Compassion, maturity, honesty, ethics, concern for others, interpersonal skills, interest, and motivation are all personal qualities that will be assessed during the admission and educational processes. Students shall be prepared to endure the physical and emotional demands of careers in research education and leadership. Students must possess organizational skills to be an effective researcher.

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Category	Standard	Example
Observation	Sufficient uncorrected or corrected visual acuity and color perception to: A. Resolve objects macroscopically as small as 0.2 mm; B. See an object from a background of other objects C. See the difference in objects	1. Identify materials correctly to be used in laboratories 2. Locate, identify, and describe foreign bodies, blood vessels, sutures and skin lesions 3. Observe audiovisual materials on projection or overhead screens during lectures 4. Read printed materials on handouts and tests 5. Locate sections on a slide 6. Identify microphotographic images projected on a screen, 7. View a class room visual aid including motion pictures, at 20 feet.
	Sufficient uncorrected or corrected visual acuity and color perception to resolve objects microscopically	1. Observe details through a microscope.
Communication	Possess fluent formal and colloquial oral English skills	1. Demonstrate command of the course material to a professor 2. Understand oral lectures, ask questions and understand answers 3. Explain research procedures and discuss results with professors and fellow students 4. Understand laboratory safety and emergency situation instructions

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Category	Standard	Example
Communication	Capable of legible handwriting in English Capable of reading and comprehending English effectively Able to perceive and convey sentiments non-verbally and effectively with professors, peers and all members of the research team	1. Participate in small group discussions with laboratory partners 2. Prepare and present reports 3. Understand typed and hand written lecture and laboratory handouts and electronic communications
Motor	Possess equilibrium and coordination of gross and fine muscular movements	1. Use a computer keyboard and mouse
	Possess sufficient visuo-motor coordination permitting delicate manipulations of specimens, instruments, and equipment appropriate to the research	1. Manipulate laboratory materials including reagents and pipettes 2. Perform microsurgical techniques or pipette solutions
Sensory	Possess accurate sense of touch and temperature discrimination Possess tolerance for exposure to and working with chemicals under approved and recognized laboratory standards	1. Participate in laboratory exercises accurately using and adjusting microscopes, glass slides, inoculating loops, pipettes, microbiological cultures and reagents
	Functional use of hearing	1. Understand oral laboratory instructions and classroom demonstration 2. Understand a speaker in a darkened room

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Category	Standard	Example
Strength and Mobility	Sufficient equilibrium, upright posture, mobility and endurance to attend and participate in lectures, examinations and laboratory exercises for extended periods of time	1. Tolerate the sitting position long enough to hear a lecture, typically 50 minutes 2. Tolerate the sitting position long enough to take a written examination, 45 minutes to 3 hours 3. Participate in laboratory exercises lasting as long as 3 hours, requiring frequent movement around the room 4. Attend mandatory classroom events for as long as 2 hours moving, sitting or standing within the room as necessary to participate in problem-based learning groups 5. Work at a laboratory bench for extended periods, 2-3 hours
Intellectual, Conceptual, Integrative and Quantitative	To receive, decode, interpret, recall, reproduce and apply information in the cognitive, psychomotor, and affective domains of learning to perceive relationships, solve problems, evaluate work, gauge progress and demonstrate understanding of course material Process multifunctional data and sensory input requiring cognitive recall and motor skills rapidly and initiate critical actions	1. Comprehend oral and written presentations 2. of material and communicate that understanding upon examination in a timely manner, occasionally demonstrating a grasp of the information within the same class period as presented 3. Successfully complete objective (true-false, multiple choice, matching, case study) bio-medical science exams designed to assess whether students can apply knowledge learned to new situations 4. Successfully perform problem-solving exercises in the laboratory including the identification of unknowns 5. Interact in group discussions and present and explain answers to worksheets 6. Be able to acquire and analyze experimental data with computer programs

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Category	Standard	Example
Behavioral and Social	Possess the emotional health required for full use of intellectual abilities Exhibit appropriate behavior, judgment and ethical standards Develop mature and effective relationships with all members of the research team including peers, faculty, and staff members	1. Work independently on all projects and examinations assessed individually 2. Control temper and never perpetrate harassment 3. Model professional behavior
	Manage priorities successfully, including competing demands and multiple tasks under time constraints	1. Complete exams and other time-sensitive assessments and requirements as scheduled 2. Attend mandatory classes, laboratory sessions and educational programs 3. Maintain passing grades and performance evaluations and obligations in academic endeavors 4. Promptly complete all class work and lab responsibilities 5. Meet writing and research assignment deadlines
	Organizational skills, both intellectually and physically Adhere to time schedule to produce reliable data. Time management skills are crucial.	1. Students must approach the experiment in an organized fashion. All components must be ready when needed. 2. Students must gather and store data in an organized fashion. 3. Students must organize their thinking to derive the hypothesis and to develop experiments to effectively test it.

Category	Standard	Example
Behavioral and Social	Adapt successfully to changing environments	1. Maintain attention, actively participate and meaningfully contribute to dialog and practical applications in the classroom, small group exercises and laboratory activities 2. Work with either cultured cells, laboratory animals or microorganisms as determined by the type of science project
	Possess constructive, positive and mature interpersonal skills, interest and motivation	1. Accept criticism and respond with appropriate modification of behavior 2. Timely and adequately respond to personal or academic struggles; seek assistance, plan, and avoid procrastination

Application Procedures for Accommodations

The institution remains open to the possibilities of human potential and achievement, providing supports for students with disabilities. The Vice President for Student Affairs is responsible for administration of and compliance with the Technical Standards and Accommodations Policy through the Director-Learning Resources. Accepted students and matriculates who have disabilities and are otherwise qualified may request accommodations in writing to the Director-Learning Resources, A.T. Still University, 800 West Jefferson Street, Kirksville, Missouri, 63501.

The Director-Learning Resources will confer with the student and may request documentation and may refer the student for individual assessment by qualified experts. The ATSU-KCOM Technical Standards and Accommodations Committee shall review any requests for accommodations. The Committee determines whether there are disabilities as protected by the Americans with Disabilities Act and then decides if reasonable accommodations can be made without altering the essential nature of the Biomedical Sciences program.

The Committee makes recommendations for or against accommodations to the Director-Learning Resources who then notifies the student and appropriate faculty and staff members who have an educational need to know. The student may appeal the decision in writing within ten days of notification to the Dean, KCOM.