

Old Dominion University

Technical Standards for All Colleges

Fall 2021



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#### **PREFACE**

Before an institution awards a degree to a student in an academic program, that student must demonstrate that he/she has met all performance requirements in the program. However, it may be necessary in the admission to a degree program that students understand what skills they must be able to demonstrate to complete the degree requirements.

As part of Old Dominion University's commitment to provide equal opportunity to all students, the President's Advisory Committee on Affirmative Action/Equal Opportunity recommended to the President that technical standards be established for each academic major. A technical standard provides information to students about programs in addition to material found in the Catalog regarding admission, prerequisite and course requirements. These technical standards can aid the academic advisor and instructor when confronted with the situation of making a determination on the admission of a student to the academic program in a consistent and nondiscriminatory manner.

This handbook of technical standards is designed as a guide for advisors and faculty. The technical standards have been established by the academic departments in conjunction with representatives from Academic Affairs, Affirmative Action and Student Services. In addition, faculty members from the Department of Early Childhood Speech Language Pathology and Special Education in the College of Education have reviewed all technical standards.



#### I. Definition of Technical Standards

A technical standard is a description of the physical and mental abilities required of students to meet curriculum requirements and to perform successfully in an academic program.

#### II. Procedure for Using Technical Standards

Technical standards are documents that can and should be used in the advising process, both when students are exploring different majors and when they want specific information on what is required in a particular program.

In the event a student has a disability, technical standards may be used to make every reasonable effort to provide accommodation. Not all students with disabilities share the same needs, even when they have similar disabilities. Therefore, it is important to determine what accommodation each student may need on an individual basis. It is the responsibility of each student to alert his or her advisor of an existing and disabling condition, which may affect the completion of degree requirements. If a question arises about the abilities of a student who wishes to enroll in a particular degree program, the department chair will consult with the advisor and the Office of Educational Accessibility concerning what accommodation the student would require.

If, after careful consideration, the department chair decides that the student is not otherwise qualified for admission to a program of study, the student will be advised of the curricular limitation resulting from his or her disability and advised of his or her academic options based strictly on technical standards. The decision of the department chair may be appealed to the dean. The dean shall consult with the assistant vice president for Equity and Diversity prior to deciding the appeal. The decision of the dean is final.

#### III. Review Procedures

The colleges, in consultation with the Office of Academic Affairs, will be responsible for a periodic review and revision of technical standards.

#### IV. Location of Technical Standards

Copies of all technical standards are located in the following offices: Counseling and Advising Services, Academic Affairs, Affirmative Action, Disability Services, General



Counsel, and Student Support Services. In addition, each dean and department chair has a copy.



**COLLEGE OF ARTS AND LETTERS** 



#### INTRODUCTION

Old Dominion University is committed to admitting qualified students without regard to race, color, religion, sex (including pregnancy), gender identity, national origin, age, veteran status, disability, political affiliation, sexual orientation or genetic information.

Candidates for a degree in the College of Arts and Letters must be able to meet the minimum standards for their program in order to complete their degree requirements successfully.

Any evidence of a possible inability to meet the safety and technical standards may be cause for further evaluation at our discretion. Such evidence may become available through the application materials, letters of recommendation, interview, or visual observations. Further evaluation may entail an interview or a physical examination, or both, by physicians or other practitioners (e.g., nurse practitioner, psychologist, etc.) of our choice.



#### African American and African Studies Programs

Students admitted to the African American and African Studies programs can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she is unable to fulfill course requirements or does not possess one or more of the following skills is encouraged to consult with their instructor(s), department advisor, academic counselor, and The Office of Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and/or personal assistance.

- 1. Comprehend and assimilate large amounts of material communicated through lectures, discussions, readings, video presentation, and library resources
- 2. Understand abstract concepts and be able to apply them to real world problems
- 3. Communicate effectively and organize thoughts to prepare written documents that are correct in style, grammar and mechanics
- 4. Participate in class discussions and presentations
- 5. Function with computers to generate, acquire and analyze data



#### **Art Department**

Students admitted to the undergraduate and graduate programs in studio art and art history can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she is unable to fulfill course requirements or does not possess one or more of the following skills is encouraged to consult with their instructor(s), department advisor, academic counselor, and The Office of Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and/or personal assistance. Color blindness can be accommodated.

- Understand and manipulate abstract concepts embodied in works of arts through critical and analytical thinking
- 2. Participate in classroom discussions
- 3. Communicate effectively and organize thoughts to prepare written documents that are correct in style, grammar and mechanics
- 4. Use safely a variety of power machine tools, presses, welding equipment, hand tools, and chemicals, based on specific classes selected
- 5. Discern subtle color and value differences in two- and three-dimensional work
- 6. Students in Art Education must meet the requirements set forth in the technical standards prepared by the Department of Teaching & Learning in the College of Education.
- 7. Students in Graphic Design must be able to visually see a computer screen with accuracy and clarity to effectively manipulate related technology and software.



#### **Asian Studies**

Students admitted to the undergraduate program of Asian Studies can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she is unable to fulfill course requirements or does not possess one or more of the following skills is encouraged to consult with their instructor(s), department advisor, academic counselor, and The Office of Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and/or personal assistance.

- 1. Understand and apply abstract concepts, which are communicated through print text, electronic media, and lecture
- 2. Comprehend and assimilate large amounts of material communicated through lectures, discussions, readings, video presentation, and library resources
- 3. Communicate effectively and organize thoughts to prepare written documents that are correct in style, grammar and mechanics
- 4. Conduct research using primary and secondary sources; function with computers to generate, acquire and analyze data; and use the Internet as a research tool and source of information
- 5. Participate in class discussions and presentations
- 6. Achieve at least an intermediate level of competence in an Asian language



#### Communication and Theatre Arts Department

Students admitted to the communication and theatre arts programs can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she is unable to fulfill course requirements or does not possess one or more of the following skills is encouraged to consult with their instructor(s), department advisor, academic counselor, and The Office of Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and/or personal assistance.

#### **Communication**

- 1. Communicate effectively and organize concepts, information, and ideas to prepare and deliver oral presentations
- 2. Analyze and demonstrate acceptable voice, articulation, and diction patterns
- 3. Prepare, deliver, participate in, and analyze types of human and mass communication
- 5. Communicate effectively and organize thoughts in written documents that are correct in grammar, style and mechanics
- 6. Achieve at least an intermediate level of competence in a foreign language or in computer skills

# Theatre and Dance (includes majors in Cinema Production, Dance, Dance Education, Design/Technology, Performance Theatre and Theatre Education)

- 1. Assimilate material communicated through lectures, readings, discussions and performances
- 2. Apply functional principles and methods of play and/or dance productions as a performer and/or technician
- 3. Memorize extensive amounts of material for rehearsal and performance activities



- 4. Use tools safely in the construction of theatrical scenery
- 5. Participate in extended rehearsals and performance activities
- 6. Students in Dance Education and Theatre Education must meet the requirements set forth in the technical standards prepared by the Department of Teaching & Learning in the College of Education.



#### **English Department**

Students admitted to the undergraduate and graduate English programs can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she is unable to fulfill course requirements or does not possess one or more of the following skills is encouraged to consult with their instructor(s), department advisor, academic counselor, and The Office of Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and/or personal assistance.

- Understand and apply theoretical concepts, which are communicated through print text, electronic media, and lecture
- Communicate effectively through written documents that target a specific audience, use the appropriate style for that audience, and follow the fundamental rules of document preparation for the writing situation, including correct usage of words, grammar and mechanics
- 3. Read and assimilate a variety of literary works, forms, and styles with understanding
- 4. Assimilate large amounts of material communicated through lecture, electronic media presentation, class discussion, library and electronic research, assigned readings, and out-of-class exchange through a variety of media
- 5. Communicate well orally (essential if seeking certification for teaching in a regular classroom or in pursuing the teaching of English as a second language)
- 6. Students in English Education must meet the requirements set forth in the technical standards prepared by the Department of Teaching & Learning in the College of Education.



#### World Languages and Cultures

Students admitted to the foreign languages programs can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she is unable to fulfill course requirements or does not possess one or more of the following skills is encouraged to consult with their instructor(s), department advisor, academic counselor, and The Office of Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and/or personal assistance.

- 1. Communicate orally in the foreign language
- 2. Distinguish fine differences in phonetics and pronunciation
- 3. Assimilate and apply theoretical concepts communicated through conversation and readings in the foreign language
- 4. Communicate in writing and prepare written documents in the foreign language
- 5. French, German, and Spanish students in Teacher Education must meet the requirements set forth in the technical standards prepared by the Department of Teaching & Learning in the College of Education.



#### Geography Program

Students admitted to the geography program can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she is unable to fulfill course requirements or does not possess one or more of the following skills is encouraged to consult with their instructor(s), department advisor, academic counselor, and The Office of Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and/or personal assistance.

- Think logically, comprehend abstract concepts and assimilate large amounts of material communicated through lectures, discussions, print and digital reading material
- 2. Ability to apply abstract concepts to real-world problems
- 3. Examine and learn from maps
- 4. Design and prepare maps using computer equipment (keyboard, mouse, monitors) and simple tools
- 5. Operate computers to input, manage, and analyze data
- 6. Accompany classes on field trips and undertake both independent and collaborative field work
- 7. Achieve at least an intermediate level of competency in computer skills (e.g., programming, geographic information systems, multimedia, etc.)



#### **History Department**

Students admitted to the undergraduate and graduate History programs can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she is unable to fulfill course requirements or does not possess one or more of the following skills is encouraged to consult with their instructor(s), department advisor, academic counselor, and The Office of Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and/or personal assistance.

- 1. Comprehend and assimilate large amounts of material communicated through lectures, discussions, readings, video presentation, and library resources
- 2. Understand and apply abstract concepts
- 3. Communicate effectively and organize thoughts to prepare written documents that are correct in style, grammar and mechanics
- 4. Participate in class discussions and presentations
- 5. Students in History or Social Science Teacher Education must meet the requirements set forth in the technical standards prepared by the Department of Teaching & Learning in the College of Education.



#### Master of Arts Program in Humanities

Students admitted to the master's program in humanities can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she is unable to fulfill course requirements or does not possess one or more of the following skills is encouraged to consult with their instructor(s), department advisor, academic counselor, and The Office of Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and/or personal assistance.

- 1. Comprehend and assimilate large amounts of material communicated through lectures, discussions, readings, video presentation, and library resources
- 2. Understand and apply abstract concepts
- 3. Communicate effectively and organize thoughts to prepare written documents that are correct in style, grammar and mechanics
- 4. Work independently in a flexible degree program



#### Interdisciplinary Studies

Students admitted to the interdisciplinary studies program can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she is unable to fulfill course requirements or does not possess one or more of the following skills is encouraged to consult with their instructor(s), department advisor, academic counselor, and The Office of Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and/or personal assistance.

- 1. Comprehend and assimilate large amounts of material communicated through lectures, discussions, readings, video presentation, and library resources
- 2. Understand and apply abstract concepts
- 3. Communicate effectively and organize thoughts to prepare written documents that are correct in style, grammar and mechanics
- 4. Work independently to formulate a degree program
- 5. Meet the technical standards established by those departments in which the concentration area is taken



Interdisciplinary Studies, Teacher Preparation Program

#### IDS-TP Early Childhood and Primary/Elementary Education Concentrations

Students admitted to a program leading to a Bachelor of Science in Interdisciplinary Studies, Teacher Preparation with a concentration in early childhood or elementary education, leading to licensure to teach PK-3 or PK-6 at the graduate level, can be expected to complete course requirements which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and the Office of Educational Accessibility concerning program requirements and possible accommodation through technical aids and assistance.

- 1. Communicate effectively by:
  - A. Demonstrating good understanding of spoken and written language.
  - B. Demonstrating the appropriate use of spoken and written language.
- C. Organizing ideas in spoken language and written documents that use formal grammar, style, and mechanics.
- 2. Demonstrate the ability to distinguish and produce individual sounds within the spoken word.
- 3. Grade student papers, maintain a grade book and attendance records, and monitor student behavior.
- 4. Accomplish or supervise the accomplishment of the following: To write legibly on a chalkboard, overhead transparency, smart board or graphics tablet; to operate projection devices including overhead projectors, digital projectors, digital video recorders/players, etc.
- 5. Supervise children and adolescents while managing various classroom environments.
- 6. Demonstrate required professional dispositions necessary to establish and maintain relationships with constituents (students, parents, and other school and community professionals) with a wide range of social, emotional, intellectual and cultural differences.
- 7. Demonstrate mental, psychological, and physical capabilities and judgment to accomplish satisfactory performance in the classroom environment and within the school as a whole.
- 8. Apply theoretical concepts to instructional and practical situations in a field placement (on or off campus).

#### **IDS-TP Special Education Licensure Concentrations**

Students admitted to a Bachelor of Science in Interdisciplinary Studies Teacher Preparation special education concentration with licensure to teach the general curriculum, adapted curriculum, or early childhood special education can be expected to complete course requirements which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and the Office of Educational Accessibility concerning program requirements and possible accommodation through technical aids and assistance.



- 1. Communicate effectively by:
  - a. demonstrating the understanding of spoken and written language.
  - b. Demonstrating the use of spoken and written language.
- c. Organizing ideas in spoken language and written documents that use formal grammar, style, and mechanics.
- 2. Demonstrate the ability to distinguish and produce individual sounds within the spoken word.
- 3. Grade student papers, maintain a grade book and attendance records, and monitor student behavior.
- 4. Accomplish or supervise the accomplishment of the following: To write legibly on a chalkboard, overhead transparency, smart board or graphics tablet; to operate projection devices including overhead projectors, digital projectors, digital video recorders/players, etc.
- 5. Supervise children and adolescents while managing various classroom environments.
- 6. Demonstrate required professional dispositions necessary to establish and maintain relationships with constituents (students, parents, and other school and community professionals) with a wide range of social, emotional, intellectual and cultural differences.
- 7. Demonstrate mental, psychological, and physical capabilities and judgment to accomplish satisfactory performance in the classroom environment and within the school as a whole.
- 8. Apply theoretical concepts to instructional and practical situations in a field placement (on or off campus).
- 9. Conduct standardized testing and formal, and informal assessment for placement, planning, monitoring and evaluating students with disabilities and develop a plan of intervention based on assessment data and knowledge of students' strengths and weaknesses and individual instructional objectives.
- 10. Meet professional standards and competencies in a practicum/internship placement in a setting relevant to the area of specialization.
- 11. Demonstrate and use the basic principles of lifting, handling and positioning with children and adolescents with disabilities.

#### **IDS-Cybersecurity**

- Assimilate theoretical concepts, which are often communicated through mathematical equations, texts, diagrams and graphs, and apply such concepts in solving hypothetical and practical problems.
- 2. Assemble and perform tests on circuits. Evaluate results from laboratory equipment including equipment of an electrical nature.



- 3. Operate electrical equipment and potentially lethal voltages and currents without injury to self or others.
- 4. Operate standard test equipment use in engineering laboratories, function with computers to assimilate signal and other types of data collected from experiments.
- 5. Communicate effectively by:
  - a. Demonstrating the understanding of spoken and written language
  - b. Demonstrating the use of spoken and written language
  - c. Organizing ideas in spoken language and written documents that use formal grammar, style, and mechanics.
- 6. Ability to work effectively in teams



#### International Studies Department

Doctor of Philosophy – International Studies (Ph.D.)

Master of Arts in International Studies (MAIS)

Bachelor of Arts – International Studies

Students admitted to the international studies programs can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she is unable to fulfill course requirements or does not possess one or more of the following skills is encouraged to consult with their instructor(s), department advisor, academic counselor, and The Office of Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and/or personal assistance.

- 1. Comprehend and assimilate large amounts of material communicated through lectures, discussions and readings
- 2. Understand abstract concepts and be able to apply them to concrete situations
- Organize conceptual and factual information and be able to communicate it effectively, orally and in writing
- 4. Be able to design and carry out an original research project
- 5. Be able to acquire or maintain foreign language proficiency
- 6. Be able to understand and analyze topical and substantive matters from an international perspective
- 7. Be able to learn and utilize critical thinking skills effectively



#### Music Department

Students admitted to the music program can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinkshe/she is unable to fulfill course requirements or does not possess one or more of the followingskills is encouraged to consult with their instructor(s), department advisor, academic counselor, and The Office of Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and/or personal assistance. The Music Department administers performance auditions in voice and instruments that are diagnostic of a student's potential in a performance medium. A standardized, recorded test is available for determination of a student's auditory acuity in areas of pitch, timbre, loudness, and time relationships. These can be used as aids when there are uncertainties regarding a student's capabilities.

- 1. Assimilate applied and theoretical concepts and relationships, which are communicated through lecture, demonstration, and problem solving
- 2. Distinguish pitch, timbre, volume, and time duration in musical terms
- 3. Coordinate theory and practice at relatively high levels of complexity
- 4. Sing or perform on a musical instrument at a level appropriate to the desired music degree program
- 5. Comprehend written music
- 6. Accomplish exercises in writing music
- 7. Meet relatively high levels of stress associated with musical performance
- 8. Communicate effectively and organize thoughts to produce written documents that are correct in grammar, style and mechanics

In addition to the above, the following requirements are for specific music programs.

#### **Music Education**

Conduct musical ensembles



- 2. Develop a level of musical performance sufficient to present a half-hour solo recital
- 3. Learn to play the piano at a minimal functional level. Students in vocal music education must have the capability to learn to sing at a functional level and play the piano beyond the minimal functional level.
- 4. Meet technical standards established by the Department of Teaching and Learning in the College of Education

#### **B.M.** in Performance

- 1. Develop a level of musical performance sufficient to present an hour long solo recital
- 2. Play the piano at a level appropriate to the student's performance degree program



#### Philosophy and Religious Studies Department

Students admitted to the philosophy program can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she is unable to fulfill course requirements or does not possess one or more of the following skills is encouraged to consult with their instructor(s), department advisor, academic counselor, and The Office of Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and/or personal assistance.

- 1. Comprehend and assimilate large amounts of material communicated through lectures, discussions, readings, video presentation, and library resources
- 2. Understand and apply abstract concepts
- 3. Think logically and apply reason to reach a conclusion
- 4. Communicate effectively and organize thoughts to prepare written documents that are correct in style, grammar and mechanics
- 5. Participate in class discussions and presentations



#### Political Science Program

Students admitted to the political science program can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she is unable to fulfill course requirements or does not possess one or more of the following skills is encouraged to consult with their instructor(s), department advisor, academic counselor, and The Office of Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and/or personal assistance.

- 1. Comprehend and assimilate large amounts of material communicated through lectures, discussions, readings, video presentation, and library resources
- 2. Understand abstract concepts and be able to apply them in specific situations
- 3. Organize conceptual and factual information and be able to communicate it effectively, verbally and in writing
- 4. Achieve at least an intermediate level of competence in computer skills
- 5. Conduct research using primary and secondary sources; function with computers to generate, acquire and analyze data; and use the Internet as a research tool and source of information



#### Sociology and Criminal Justice Department

Students admitted to the undergraduate and graduate sociology and criminal justice programs can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she is unable to fulfill course requirements or does not possess one or more of the following skills is encouraged to consult with their instructor(s), department advisor, academic counselor, and The Office of Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and/or personal assistance.

- Assimilate large amounts of material communicated through lectures, discussions and readings
- 2. Comprehend and manipulate abstract concepts
- 3. Communicate effectively and organize thoughts to prepare written documents that are correct in style, grammar and mechanics
- 5. Function with computers to generate, acquire and analyze data
- 6. Achieve at least an intermediate level of competence in quantitative computer skills for graduate studies



#### Women's Studies Department

Students admitted to the women's studies department can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she is unable to fulfill course requirements or does not possess one or more of the following skills is encouraged to consult with their instructor(s), department advisor, academic counselor, and The Office of Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and/or personal assistance.

- 1. Comprehend and assimilate concepts and information communicated through lectures, discussions, readings and video programs
- 2. Understand abstract concepts and be able to apply them in specific situations
- 3. Organize conceptual and factual information and be able to communicate it effectively, verbally and in writing
- 4. Achieve at least an intermediate level of competence in computer skills
- 5. Conduct research using computers to generate, acquire and analyze data; and use the Internet as a research tool and source of information; use the Internet asa research tool and source of information.
- 6. Make oral presentations in class and at outside events, such as graduation and student conferences



#### **ACCOMMODATIONS**

It is the policy of Old Dominion University to provide reasonable accommodation to qualified students with a disability who can perform the essential functions as outlined in the above technical standards. Reasonable accommodation may be made in the form of administration of the evaluation where necessary; documented and requested in advance in accord with standards and requirements of the Americans with Disabilities Act Amendments (ADAAA). Whether or not a requested accommodation is reasonable will be determined on an individual basis. Determining what is a reasonable accommodation is an interactive process which the candidate/student should initiate with the Office of Educational Accessibility, in conjunction with the Office of Institutional Equity and Diversity and the respective department.



#### **STROME COLLEGE OF BUSINESS**



#### Accounting

Students admitted to the accounting program can be expected to complete course requirements that necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or facultyadvisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Comprehend large amounts of information communicated through lectures, discussions and readings.
- 2. Think logically and in depth, particularly in the depiction of the flow and recording of information and the preparation of financial statements.
- 3. Use empirical and statistical analyses and manipulate complex data.
- 4. Communicate effectively and organize concepts, information, and ideas to prepare written documents and oral presentations that are correct in grammar, style and mechanics.
- 5. Use computers to generate and acquire data in completing course assignments.
- 6. Participate in class discussions and communicate effectively with different clientele.



#### **Department of Economics**

Students admitted to the B.S. and B.A. programs in economics can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Assimilate large amounts of materials communicated through lectures, discussions and readings.
- 2. Comprehend abstract concepts and assimilate these concepts for application to practical problems at a later date.
- 3. Gather relevant facts to obtain economic principles that may be used to formulate policies, which will solve economic problems.
- 4. Use empirical and statistical analyses and manipulate complex data.
- 5. Communicate effectively and in written documents that are correct in grammar, style and mechanics.
- 6. Function with computers to generate and acquire data.



#### **Finance**

Students admitted to the finance program can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or facultyadvisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Participate in class discussions and communicate effectively with different clientele.
- 2. Apply theoretical concepts and theories to practical financial problems such that creative and innovative solutions can be found and successfully executed.
- 3. Use and understand statistical techniques in a computer-based analytical package for simple and complex financial research analysis and interpretation.
- 4. Grasp and understand financial methods and analysis.
- 5. Comprehend or demonstrate a working knowledge of the interrelationships involved in a global economy and the effects on nations, organizations, and the individual.
- 6. Communicate effectively and in written documents that are correct in grammar, style and mechanics.
- 7. Function with computers to generate and acquire data.



#### Management

Students admitted to the management program can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- Think logically, comprehend abstract concepts, assimilate large amounts of material communicated through lectures, discussions, and readings, and apply concepts to realworld problems.
- 2. Communicate effectively and organize thoughts to prepare written documents that are correct in grammar, style and mechanics, and give class presentations.
- 3. Function with computers to generate and acquire data.



Department of Information Systems/Decision Sciences

#### Information Systems and E-Commerce

Students admitted to the various programs offered through Information Systems can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Apply theoretical concepts to practical problems, in particular the application of problem-solving techniques to design and development of software engineering applications.
- 2. The student must be able to utilize appropriate computer software to design and implement information systems and database management systems.
- 3. The student must be able to configure both the hardware and software that support local area and wide area networks.
- 4. The student must demonstrate the ability to communicate effectively when giving oral presentations and submitting assignments.
- 5. Students must think logically in the development of technical solutions to complex problems that involve the application of technology in the business environment. This is especially important in the emerging markets of e-commerce and global business.

#### **Business Analytics**

Students admitted to the Business Analytics program can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Apply theoretical concepts to practical problems, in particular the application of problemsolving techniques to design and development of models and computer programs in support of business operations.
- 2. Function with calculators to solve problems and with computers to generate and acquire information.



- 3. Think logically and in depth, particularly in the development of mathematical and computer models.
- 4. Communicate effectively and prepare written documents that are correct in grammar, style and mechanics.
- 5. Communicate complex analytical concepts in written documents.
- 6. Demonstrate competence in analytical thinking.



#### Marketing

Students admitted to the marketing program can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or facultyadvisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Understand and model the thought processes involved in buyer decision making at simple and complex levels.
- 2. Communicate effectively both orally and through written documents that are correct in grammar, style and mechanics.
- 3. Participate in class discussions and communicate effectively with different constituents.
- 4. Apply theoretical concepts and theories to practical marketing problems such that creative and innovative solutions can be found and successfully executed.
- 5. Use and understand statistical techniques in a computer-based analytical package for simple and complex marketing research analysis and interpretation.
- 6. Grasp and understand research methods and analysis in evaluating new and existing marketing programs/products or services.
- 7. Comprehend or demonstrate a working knowledge of the interrelationships involved in a global economy and the effects on nations, organizations, and the individual.
- 8. Function with computers to generate and acquire data.



#### School of Public Service

Students admitted to programs offered by the School of Public Service in the Strome College of Business can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Disability Services concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Assimilate large amounts of material communicated through lectures, discussions and readings.
- 2. Communicate effectively and prepare written documents that are correct in grammar, style and mechanics.
- 3. Understand and apply abstract concepts.
- 4. Participate in class discussions and communicate effectively within and between diverse groups, in written and verbal forms.
- 5. Comprehend or demonstrate a working knowledge of the interrelationships involved in government organizations and the effects on the individual, locality, state, nation, and world.
- 6. Function with computers to generate and acquire information and data.



#### Strome College of Business Graduate Degree Programs

Students admitted to graduate degree programs offered by the Strome College of Business can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Understand and model the thought processes involved in profit/non-profit decision-making at the simple and complex levels.
- 2. Communicate effectively in written documents that are correct in grammar, style and mechanics.
- 3. Participate in class discussions and communicate effectively with different clientele.
- 4. Apply theoretical concepts and theories to practical business/public sector problems such that creative and innovative solutions can be found and successfully executed.
- 5. Use and understand statistical techniques in a computer-based analytical package for simple and complex business/public sector research analysis and interpretation.
- 6. Grasp and understand financial methods and analysis in evaluating new and existing businesses/public sector problems.
- 7. Comprehend or demonstrate a working knowledge of the interrelationships involved in a global economy and the effects on nations, organizations, and the individual.
- 8. Function with computers to generate and acquire data.



#### Strome College of Business Graduate Degree Programs

Students admitted to graduate degree programs offered by the Strome College of Business t can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 9. Understand and model the thought processes involved in profit/non-profit decision-making at the simple and complex levels.
- 10. Communicate effectively in written documents that are correct in grammar, style and mechanics.
- 11. Participate in class discussions and communicate effectively with different clientele.
- 12. Apply theoretical concepts and theories to practical business/public sector problems such that creative and innovative solutions can be found and successfully executed.
- 13. Use and understand statistical techniques in a computer-based analytical package for simple and complex business/public sector research analysis and interpretation.
- 14. Grasp and understand financial methods and analysis in evaluating new and existing businesses/public sector problems.
- 15. Comprehend or demonstrate a working knowledge of the interrelationships involved in a global economy and the effects on nations, organizations, and the individual.
- 16. Function with computers to generate and acquire data.



**Darden College of Education & Professional Studies** 



Department of Communication Disorders and Special Education Masters of Science in Speech-Language Pathology Communication Sciences and Disorders (graduate program)

Students admitted to the graduate speech-language pathology program are expected to complete course and clinical requirements which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills or attributes should seek assistance from an academic counselor or faculty advisor and the Office of Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance. Several of these standards have been adapted from the Essential Functions checklist of the Council of Academic Programs in Communication Sciences and Disorders.

#### 1. Communication and Cognition:

- a. Communicate proficiently in oral and written English language with correct grammar, style and mechanics (e.g., spelling and pronunciation).
- b. Read and write in order to meet curricular and clinical demands.
- c. Perceive and demonstrate phonological patterns of English and perceive and analyze differences from Standard English.
- d. Perceive and demonstrate appropriate nonverbal communication for culture and context
- e. Modify communication style to meet the communication needs of clients, families, and other professionals.
- f. Comprehend, retain, integrate, synthesize, infer, evaluate and apply written and verbal information sufficient to meet curricular and clinical demands.
- g. Solve problems, reason, and make sound clinical judgments in client assessment, diagnostic and therapeutic planning and implementation.

#### 2. Motor skills:

- Sustain physical activity level necessary in classroom and clinical activities (e.g., ambulate to access clients; lift and manipulate clinical instruments, tests and materials).
- b. Respond quickly to provide a safe environment for clients in an emergency situation (e.g., fire, choking).
- c. Access transportation to clinical and academic placements.
- d. Participate in classroom and clinical activities for the defined workday (e.g., full 8-10 hour workday).
- e. Manipulate patient-utilized equipment (e.g., computer systems, hearing aids) in a safe manner.



#### 1. Behavioral/Social skills:

- a) Display empathy and effective professional relationships by exhibiting compassion, integrity and concern for others.
- b) Show respect for individuals with disabilities and different backgrounds.
- c) Establish interpersonal rapport sufficient to interact appropriately with others in academic settings.
- d) Maintain good physical and mental health and self-care in order not to jeopardize the health, safety and well-being of self and others in classroom settings.
- e) Adapt to changing and demanding environment which includes maintaining professional demeanor and emotional balance in stressful circumstances.
- f) Manage time effectively to complete academic tasks.
- g) Respond in a professional manner to suggestions and constructive criticism.
- h) Dress appropriately and professionally.
- i) Demonstrate ability to be comfortable in a confined space.



Department of Communication Disorders and Special Education Special Education Programs – Graduate and Undergraduate Programs (General Curriculum, K-12; Early Childhood Special Education; Adapted Curriculum, K-12)

Students admitted to any undergraduate or graduate special education program that leads to initial licensure in general curriculum, adapted curriculum, or early childhood special education are expected to demonstrate the physical and cognitive abilities listed below. These standards apply to all course delivery models, including traditional, distance learning (i.e., synchronous/web-conferencing or asynchronous/online), or hybrid.

Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and the Office of Educational Accessibility concerning program requirements and possible accommodation through technical aids and assistance.

#### 1. Communication and Cognition

- a. Communicate effectively by:
  - demonstrating the understanding of spoken and written language.
  - demonstrating the use of spoken and written language.
  - organizing ideas in spoken and written language using formal grammar, style, and mechanics.
- b. Demonstrate cognitive, psychological, and physical skills needed to meet satisfactory performance standards in the classroom environment and within the school as a whole.
- c. Apply sound concepts and professional judgment to instructional and practical situations (on or off campus) involving delivery of educational services to students.
- d. Identify, evaluate, and apply relevant evidence-based strategies in the classroom.

#### 2. Motor Skills

- a. Conduct formal and informal assessment to support placement and planning, as well as monitoring and evaluating the social, behavioral, and/or academic level of performance of students with disabilities.
- b. Utilize data and knowledge of students' strengths and weaknesses to assist in the development of a plan of intervention and individual instructional objectives.
- c. Grade student assignments, maintain a grade book and attendance records, and monitor student behavior.
- d. Monitor or supervise the following:
  - i. to write legibly on a chalkboard, overhead transparency, smart board or graphics tablet.
  - ii. to operate projection devices including overhead projectors, digital projectors, digital video recorders/players, etc.



e. Demonstrate and use the basic principles of lifting, handling, and positioning with children and adolescents with disabilities.

#### 3. Sensory Skills

- a. Possess sufficient hearing and vision to meet curricular and instructional demands in the classroom.
- b. Demonstrate the ability to distinguish and produce individual sounds within the spoken word.

#### 4. Behavioral/Social Skills

- a. Supervise children and adolescents while managing various classroom environments.
- b. Demonstrate identified professional dispositions necessary to establish and maintain relationships with constituents (students, parents, other school personnel, and members of the community) with a wide range of social, emotional, intellectual, and cultural differences.
- c. Meet professional standards and competencies in practicum/internship placement relevant to the student's area of endorsement.
- d. Manage time effectively to complete academic tasks, including the development and delivery of relevant lessons as required.
- e. Respond in a professional manner to suggestions and constructive evaluation and feedback.
- f. Exhibit professional attire at all times.



Department of Counseling and Human Services Programs in Counseling and Human Services

Students admitted to the undergraduate human services or the graduate counseling program are expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any students who think they do not possess one or more of the following skills should seek assistance from an academic or faculty advisor and/or an Office of Educational Accessibility representative concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Analyze and apply knowledge and concepts acquired through lectures, discussions and class materials and assignments.
- 2. Establish and maintain facilitative interpersonal relationships with individuals and groups, in and outside of class, with a wide variety of cultural and linguistic identities and abilities.
- 3. Successfully complete an internship experience which has been approved by the corresponding academic program.
- 4. Understand and be able to apply the appropriate professional ethical standards (e.g., ACA or NOHS code of ethics).
- 5. Develop and demonstrate key professional dispositions (e.g., accountability/conscientiousness, self-regulation) for the field of practice.
- 6. Effectively share and receive constructive criticism.
- 7. Demonstrate a commitment to cultivating cultural and linguistic dexterity.
- 8. Access and ability to navigate online learning platforms if applicable



Department of Educational Foundations and Leadership (Graduate Licensure Programs)

Students admitted to the graduate licensure programs in school leadership are expected to complete course requirements which necessitate the physical and mental abilities listed below. Any student who thinks they does not possess one or more of the following skills or attributes should seek assistance from an academic counselor or faculty advisor and the Office of Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance. Several of these standards have been adapted from the Virginia Department of Education's Guidelines for Uniform Performance Standards and Evaluation Criteria for Principals.

#### Learning Behaviors:

- 1. Build on prior knowledge and integrate new and enhanced understandings through a variety of learning modalities including:
- a. Lectures
- b. Discussions
- c. Independent reading
- d. Role playing, simulations, re-teaching
- e. Site visits and interviews
- f. Writing
- 2. Comprehend, retain, integrate, synthesize, infer, evaluate and apply written and verbal information sufficient to meet curricular demands
- 3. Demonstrate the behaviors of an internally motivated and self-directed learner
- 4. Demonstrate the ability to set learning goals, monitor progress towards those goals, and utilize instructor and peer feedback to improve and enhance learning
- 5. Read at the level needed in order to meet curricular demands

#### Communication:

6. Communicate proficiently in oral and written English language with correct grammar, style and mechanics (e.g., spelling and pronunciation)



- 7. Perceive and demonstrate appropriate nonverbal communication for culture and context
- Behavioral/Social skills:
- 8. Demonstrate empathy by exhibiting compassion, integrity and concern for others
- 9. Show respect for individuals with disabilities and different backgrounds
- 10. Establish interpersonal rapport sufficient to interact appropriately in academic settings
- 11. Adapt to changing and demanding environment which includes maintaining professional demeanor and emotional balance in stressful circumstances
- 12. Manage time effectively to complete academic tasks
- 13. Demonstrate ability in facilitating and developing the capacity of others (VDOE Uniform Performance Standards)
- 14. Demonstrate ability in oversight and management (VDOE Uniform Performance Standards)
- 15. Demonstrate collaborative and team and community building skills (VDOE Uniform Performance Standards)
- 16. Demonstrate an advocacy orientation (VDOE Uniform Performance Standards)



#### Department of Teaching & Learning

Students admitted to a program leading to a Bachelor of Science in Education, Bachelor of Science in one or more of the related content areas that has an approved teacher education program, or a Master of Science in Education with a major in elementary, secondary education, reading, or a non-degree licensure program can be expected to complete course requirements which necessitates the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and the Office of Educational Accessibility concerning program requirements and possible accommodation through technical aids and assistance.

- 1. Communicate effectively by:
  - a. Demonstrating good understanding of spoken and written language.
  - b. Demonstrating the appropriate use of spoken and written language.
  - c. Organizing ideas in spoken language and written documents that use formal grammar, style, and mechanics.
- 2. Demonstrate the ability to distinguish and produce individual sounds within the spoken word.
- 3. Grade student papers, maintain a grade book and attendance records, and monitor student behavior.
- 4. Accomplish and supervise the accomplishment of the following: To write legibly on a chalkboard/whiteboard, overhead transparency, smart board or graphics tablet; to operate projection devices including overhead projectors, digital projectors, digital video recorders/players, document cameras, etc.
- 5. Supervise children and adolescents while managing various classroom environments.
- Demonstrate professional dispositions necessary to establish and maintain relationships with constituents (students, parents, and other school and community professionals) with a wide range of social, emotional, intellectual, and cultural differences.
- 7. Demonstrate mental, psychological, and physical capabilities and judgment to accomplish tasks in the classroom environment and within the school as a whole.
- 8. Apply theoretical concepts to instructional and practical situations in a field placement (on or off campus).
- 9. Meet professional standards and competencies in a field placement (on or off campus).
- 10. Operate and manage the virtual environment through computer devices.



# Department of Human Movement Sciences Exercise Science Program

Students admitted to undergraduate and graduate programs in exercise science (EXSC) can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and the Office of Educational Accessibility concerning program requirements and possible accommodation through technical aids and assistance.

- 1. Possess mental, emotional, and physical capabilities and judgment to accomplish satisfactory performance in the classroom environment and within practical settings.
- 2. Demonstrate written, oral, and technological communication skills to express ideas, foster understanding, and effectively interact with others.
- 3. Display competence in using a computer for word processing, graphics, internet searches, and spreadsheets.
- 4. Acquire and apply theoretical and practical knowledge in core content areas in accordance with the program requirements (e.g., measurement of heart rate, blood pressure, body composition to name a few).
- 5. Meet professional standards and competencies in a practicum/internship placement in a setting relevant to the discipline (Preventive/Rehabilitation Track at the undergraduate level, and the Internship Track at the graduate level).
- 6. Acquire skills and display competence in research methods, data collection, statistical analysis, data interpretation, and scientific writing (Scientific Foundations Track at the undergraduate level, and the Thesis and Research Problem Tracks at the graduate level).
- 7. Display mental and emotional stability and professional behaviors to interact with other individuals in a respectful and responsible manner.
- 8. Engage in physical activities and explain, demonstrate, and teach skills involving aerobic, resistance, and neuromuscular exercise.



# Department of Human Movement Sciences Health & Physical Education Program

Students admitted to the undergraduate program in Health & Physical Education (HPE) can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and the Office of Educational Accessibility concerning program requirements and possible accommodation through technical aids an assistance.

- 1. Possess mental, emotional, and physical capabilities and judgements to accomplish satisfactory performance in the classroom environment and within practical settings.
- 2. Demonstrate written, oral, and technological communication skills to express ideas, foster understanding, and effectively interact with others.
- 3. Acquire and apply theoretical and practical knowledge in core content areas in accordance with program requirements.
- 4. Meet professional standards and competencies in practicum/internship placements in physical education/activity settings.
- 5. Display mental and emotional stability and professional behavior to interact with other individuals and/or apparatus in a respectful and responsible manner.
- 6. Demonstrate professional dispositions and interpersonal skills necessary to establish and maintain proper relationships with constituents (athletes, students, parents, school administrators, and faculty) within a wide range of athletic/academic contexts.
- 7. Demonstrate equitable professional behavior when working with individuals from diverse (gender, racial, ethnic, disability/ability, sexual orientation, age) groups.
- 8. Demonstrate compassion, sensitivity, concern, and care for others.
- 9. Engage in physical activities and demonstrate the ability to explain and teach movement-related skills.
- 10. Meet the technical standards established by the Department of Teaching & Learning, and meet the requirements set by the Office of Clinical Experiences.



11. Meet the professional ethics standards communicated by the Society of Health and Physical Educators (SHAPE America) and the Virginia Department of Education.

#### For graduate students in HPE, they will need to

- 1. Pass the entrance and professional exams and background checks needed for professional certificate and/or licensure.
- 2. Possess mental, emotional, and physical capabilities and judgment to teach/coach in the classroom, gymnasium environment, and within practice settings.
- 3. Acquire and apply theoretical and practical knowledge in HPE, maintain a minimum of 3.0 grade point average, and pass the necessary exams in accordance with the latest program requirements.
- 4. Show high competence to use a variety of techniques and technologies to track and assess student/athlete attendance, progress, and performances.
- 5. Obtain and maintain a sufficient level of psychomotor skills and physical fitness to demonstrate, present, teach, and/or coach in a variety of classroom, gymnasium, and practice contexts.
- 6. Show the ability to search, summarize, assess, and use research literature to write and present research/professional articles, and make professional decisions.
- 7. Demonstrate professional dispositions and interpersonal skills necessary to establish and maintain proper relationships with constituents (athletes, students, parents, and other school and community professionals) within a wide range of athletic/academic contexts.
- 8. Demonstrate compassion, sensitivity, concern, and caring for others; and have an emergency and management plan within the context of practice (e.g., schools).
- 9. Students in the initial Virginia Licensure track must also meet the technical standards established by the Department of Teaching & Learning, and meet the requirements set by the Office of Clinical Experiences, and professional ethical standards (e.g., SHAPE America, NSCA, VDOE).



#### **Department of Human Movement Sciences**

Park, Recreation and Tourism Studies Program

Students admitted to undergraduate and graduate programs in Park, Recreation & Tourism Studies (PRTS) can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who does not possess one or more of the following should seek assistance from an academic counselor or faculty advisor and the Office of Educational Accessibility concerning program requirements and possible accommodation through technical aids and assistance (or consider switching majors).

- 1. Possess mental, emotional, and physical capabilities and judgment to accomplish satisfactory performance in the classroom environment and within practical settings.
- 2. Demonstrate written, oral, and technological communication skills to express ideas, foster understanding, and effectively interact with others.
- 3. Display competence in using a computer for word processing, graphics, internet searches, and spreadsheets.
- 4. Acquire and apply theoretical and practical knowledge in core content areas in accordance with the program requirements.
- 5. Meet professional standards and competencies in an internship placement in a park, recreation or tourism setting.
- 6. Display mental and emotional stability and professional behaviors to interact with other individuals in a respectful and responsible manner.
- 7. Use the basic principles of group leadership in a recreational setting.



- 8. Demonstrate entry-level knowledge of the history, foundation, scope of the park, recreation and tourism field, as well as techniques and processes used by professionals in the field.
- 9. Demonstrate entry-level knowledge about the operation and administration of park, recreation and tourism agencies.
- 10. Be able to design, implement and evaluate park, recreation and tourism programs for a diverse constituency.
- 11. Demonstrate the ways research can be used to inform professional practice in park, recreation and tourism management. (Graduate)
- 12. Demonstrate an understanding of various research methods and the research process for the field of park, recreation and tourism studies. (Graduate)



# Department of Human Movement Sciences Sport Management Program

Students admitted to the sport management program are expected to complete course and internship requirements which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills or attributes should seek assistance from an academic counselor or faculty advisor and the Office of Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

#### 11. Intellectual Skills:

- h. Comprehend, retain, integrate, synthesize, infer, evaluate and apply written and verbal information sufficient to meet curricular demands
- i. Display competence in using a computer for word processing, graphics, internet searches, spreadsheets, and virtual classrooms.
- j. Communicate proficiently in oral and written English language with correct grammar, style and mechanics (e.g., spelling and pronunciation).
- k. Demonstrate written, oral, and technological communication skills to express ideas, foster understanding, and effectively interact with others.

#### 3. Professional Skills:

- a. Demonstrate current practices and principles acceptable in the academic and sport marketplace communities.
- b. Participate in experiential learning activities relevant to the curriculum.
- c. Understand and deal effectively with current issues facing the sport industry.
- d. Meet professional standards and competencies in a practicum/internship placement setting relevant to the area of specialization.
- e. Use proper email etiquette for all professional correspondences

#### 4. Behavioral Skills:

- a. Behave professionally in both on-site and online environments.
- b. Display empathy and effective professional relationships by exhibiting compassion, integrity and concern for others.
- c. Establish interpersonal rapport sufficient to interact appropriately with others in academic and practical settings.
- d. Adapt to changing and demanding environments, which includes maintaining professional demeanor and emotional balance in stressful circumstances.
- e. Manage time effectively to complete academic and extracurricular tasks.
- f. Abide by the ODU policies on student conduct and academic integrity.



STEM Education and Professional Studies Department Marketing Education, Fashion, Training Specialist and Graduate Occupational and Technical Education

Students admitted to the program leading to a Bachelor of Science in Occupational and Technical Studies (marketing education, fashion, and training specialist majors), or the Master of Science in Occupational and Technical Studies with a major in middle and secondary career and technical education and business and industry training can be expected to complete course requirements which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and the Office of Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Assimilate material communicated through lectures, discussions, and readings.
- 2. Participate in and complete an appropriate directed work experience.
- 3. Communicate effectively and organize ideas in written documents that are correct in grammar, style and mechanics.
- 4. Use computing systems to prepare homework, papers, and projects and electronically receive and send class related materials.
- 5. Communicate effectively and organize ideas for oral presentations in class or from a distance using electronic technology (distance learning students).
- 6. Verbally communicate with students, co-workers, and other personnel.
- 7. Use research-based methods to solve real-world problems (MS).



# STEM Education and Professional Studies Department Technology Education and Industrial Technology Programs

Students admitted to the Bachelor of Science in Occupational and Technical Studies with majors in industrial technology or technology education can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and the Office of Educational Accessibility concerning any flexibility in program requirements and possible accommodations through technical aids and assistance.

- 1. Assimilate and apply abstract concepts to design and plan projects and solve technical problems.
- 2. Layout, assemble, and finish technical projects.
- 3. Use materials, tools and machines associated with industry.
- 4. Communicate effectively and organize ideas in written documents that are correct in grammar, style and mechanics.
- 5. Verbally communicate with students, co-workers, and other personnel.
  - 8. Function safely in laboratories.
  - 9. Sustain contact with industrial materials and solvents without experiencing allergic reactions.
  - 10. Monitor teaching/laboratory facilities which host multiple activities.
  - 11. Use computing systems to prepare homework, papers, and projects and electronically receive and send class related written information.
  - 12. Communicate effectively and organize ideas for oral presentations in class or from a distance using electronic technology (distance learning students).



#### **ACCOMMODATIONS**

It is the policy of Old Dominion University to provide reasonable accommodation to qualified students with a disability who can perform the essential functions as outlined in the above technical standards. Reasonable accommodation may be made in the form of administration of the evaluation where necessary; documented and requested in advance in accord with standards and requirements of the Americans with Disabilities Act Amendments (ADAAA). Whether or not a requested accommodation is reasonable will be determined on an individual basis. Determining what is a reasonable accommodation is an interactive process which the candidate/student should initiate with the Office of Educational Accessibility, in conjunction with the Office of Institutional Equity and Diversity and the respective department.



**COLLEGE OF ENGINEERING AND TECHNOLOGY** 



#### Civil and Environmental Engineering

Students admitted to the undergraduate and graduate civil and environmental engineering programs can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Synthesize theoretical concepts, which are often communicated through mathematical equations, texts, diagram and graphs, and apply suchconcepts in solving hypothetical and practical problems.
- 2. Assemble, perform tests on and evaluate results from laboratory equipment including equipment of a mechanical, electrical or optical nature.
- 3. Operate test equipment used in civil and environmental engineeringlaboratories and be able to use computers and computer programs to organize, analyze, tabulate, and graphically represent data.
- 4. Understand the hazards of working with chemicals and also the proper handling, exposure, and disposal of such. Understand the hazards of mechanical equipment and the forces and weights that can cause injury (potentially fatal) through improper operation. Understand the hazards of electrical equipment with potentially lethal voltages/currents and recognize how to operate equipment without harm.
- 5. Able to distinguish loudness and tonal differences in laboratory experiments and classroom lectures.
- 6. Communicate effectively by:
  - A. Demonstrating the understanding of spoken and written language.
  - B. Demonstrating the use of spoken and written language.
  - C. Organizing ideas in spoken language and written documents that use formal grammar, style, and mechanics.
- 7. Organize concepts, information and ideas to prepare and deliver oral presentations.
- 8. Work in teams effectively.



#### Civil Engineering Technology Program

Students admitted to the construction and civil engineering technology program must complete course requirements that may necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program ogram requirements and possible accommodation through technical aids and assistance.

- 1. Communicate effectively by:
  - A. Demonstrating the understanding of spoken and written language.
  - B. Demonstrating the use of spoken and written language.
  - C. Organizing ideas in spoken language and written documents that use formal grammar, style, and mechanics.
- 2. Comprehend concrete and theoretical concepts communicated through mathematical equations, texts, drawings, tables and graphs, and apply such concepts in solving hypothetical and practical problems.
- 3. Utilize computers and interpret and analyze data from either a computer monitor or a printed output.
- 4. Have the physical strength and stamina to satisfactorily direct or perform surveying field operations.
- 5. Participate in class-conducted field trips to local industry and construction sites.
- 6. Work safely with chemicals.
- 7. Must be able to work effectively in teams.



#### **Electrical and Computer Engineering**

Students admitted to the undergraduate and graduate electrical and computer engineering programs can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Assimilate theoretical concepts, which are often communicated through mathematical equations, texts, diagrams and graphs, and apply such concepts in solving hypothetical and practical problems.
- 2. Assemble and perform tests on circuits. Evaluate results from laboratory equipment including equipment of an electrical nature.
- 3. Operate electrical equipment and potentially lethal voltages and currents without injury to self or others.
- 4. Operate standard test equipment used in engineering laboratories, function with computers to assimilate signal and other types of data collected from experiments.
- 5. Communicate effectively by:
  - a. Demonstrating the understanding of spoken and written language.
  - b. Demonstrating the use of spoken and written language.
  - c. Organizing ideas in spoken language and written documents that use formal grammar, style, and mechanics.
- 6. Ability to work effectively in teams.



#### Electrical Engineering Technology Program

Students admitted to the electrical engineering technology program can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Assimilate and apply theoretical concepts communicated through mathematical equations, circuit diagrams, and graphs.
- 2. Assemble, perform tests on, and evaluate prototype circuits using micro• electric components spaced at close intervals. This includes the ability to read small lettering and colored bands on components.
- 3. Use small tools such as needle nose pliers, wrenches, screwdrivers, and wire wrapping tools.
- 4. Work with rotating electrical machines and potentially lethal voltages and currents without injury to self or others.
- 5. Utilize computers and interpret and analyze data from either a computer monitor or a printed output.
- 6. Communicate effectively by:
  - A. Demonstrating the understanding of spoken and written language.
  - B. Demonstrating the use of spoken and written language.
  - C. Organizing ideas in spoken language and written documents that use formal grammar, style, and mechanics.
- 7. Be able to view flashing lights such as that emitted by a tachometer.
- 8. Must be able to work effectively in teams.



#### Department of Engineering Management and Systems Engineering

Students admitted to engineering management or systems engineering programs can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Synthesize theoretical concepts, which are often communicated through mathematical equations, texts, diagrams and graphs, and apply such concepts in solving hypothetical and practical problems.
- 2. Communicate effectively by:
  - a. Demonstrating the understanding of spoken and written language.
  - b. Demonstrating the use of spoken and written language.
  - c. Organizing ideas in spoken language and written documents that use formal grammar, style, and mechanics.
- 3. Orally communicate complex ideas in a live or distance learning environment.
- 4. Use a computer to communicate with faculty and other students as well as to use software related to engineering management and systems engineering applications to include programs such as simulation tools such as Excel Solver and At Risk.
- 5. Work effectively in teams environments, to include virtual teams, to help solve complex problems in a cost-effective and time saving manner.



#### Mechanical and Aerospace Engineering

Students admitted to the undergraduate and graduate mechanical and Aerospace engineering programs can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- Comprehend and synthesize theoretical and numerical concepts, which are often communicated through mathematical equations, texts, research papers, diagrams, tables and graphs, and apply such concepts in solving research, hypothetical and practical problems.
- 2. Assemble, perform tests on, and evaluate results from laboratory equipment including but not limited equipment of a mechanical, electrical or optical nature.
- 3. Operate devices such as computers, optical, electrical and mechanical instrumentation and test equipment without injury to self or other.
- 4. Communicate effectively in oral presentations, written documents and while working with peers and instructors. All written documents should be correct in grammar, style, and mechanics.
- 5. Communicate effectively by:
  - A. Demonstrating the understanding of spoken and written language.
  - B. Demonstrating the use of spoken and written language.
  - C. Organizing ideas in spoken language and written documents that use formal grammar, style, and mechanics.
- 6. Have the ability to organize concepts and information. This includes drawing conclusions in order to prepare reports including scientific reports.
- 7. Work in teams effectively.



#### Mechanical Engineering Technology Program

Students admitted to the mechanical engineering technology program can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Disability Services concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Assimilate and apply theoretical concepts communicated through mathematical equations, mechanical drawings, and graphs.
- 2. Communicate through drafting and the use of drafting instruments and complete programs.
- 3. Participate in group laboratory experiments using mechanical components such as pumps, turbines, and valves.
- 4. Operate rotating electrical machines and other devices with potentially lethal voltages and currents without injury to self or others.
- 5. Utilize computers and interpret and analyze data from either a computer monitor or a printed output.
- 6. Communicate effectively by:
  - a. Demonstrating the understanding of spoken and written language.
  - b. Demonstrating the use of spoken and written language.
  - c. Organizing ideas in spoken language and written documents that use formal grammar, style, and mechanics.
- 7. Must be able to work effectively in teams.



#### Modeling Simulation & Visualization Engineering

Students admitted to the undergraduate and graduate modeling and simulation engineering programs can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- Assimilate theoretical concepts, which are often communicated through mathematical equations, texts, diagrams and graphs, and apply such concepts in solving hypothetical and practical problems.
- 2. Assemble, perform tests on, and evaluate results from laboratory equipment.
- 3. Operate standard test equipment used in engineering laboratories, function with computers to assimilate data.
- 4. Communicate effectively by:
  - a. Demonstrating the understanding of spoken and written language.
  - b. Demonstrating the use of spoken and written language.
  - c. Organizing ideas in spoken language and written documents that use formal grammar, style, and mechanics.
- 5. Ability to work effectively in teams.



#### **COLLEGE OF HEALTH SCIENCES**



#### **Environmental Health Program**

Students admitted to the Environmental Health program can be expected to complete courses, which require the physical and mental abilities outlined below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor, faculty advisor, and Office of Educational Accessibility. The student will be advised on flexibility in program requirements and possible accommodation through technical aids and assistance. The student will be expected to:

- Assimilate technical and non-technical knowledge through lectures, discussions, and readings, as well as laboratory and internship experiences. In order to perform the internship, the student must have the ability to communicate effectively to groups, and to apply knowledge acquired in the program.
- 2. Comprehend and use basic mathematical skills in order to calculate, for example, areas, volumes, ratios, proportions, distances, dilutions, and disinfectant and pesticide dosages.
- Comprehend and use statistical skills in order to perform epidemiological investigations, such as, defining the extent of infectious and non-infectious illness, incidence and prevalence, and preparing various types of reports.
- 4. Read tables, charts, graphs, blueprints, dials and gauges, and discriminate colors for reading colorimetric instruments and papers, as well as for distinguishing soil colors.
- 5. Possess sufficient tactile function in order to differentiate soil textures and spillage slimes.
- 6. Have the olfactory capability to detect trace changes in, for example, food odors or gases, and other chemicals.
- 7. Have sufficient manual dexterity; be able to manipulate monitoring instruments, dials, syringes, droppers, calibrating screwdrivers, and other small tools.
- 8. Assisted or unassisted, be able to move over rough terrain carrying augers, tools and various instruments
- 9. Detect sound changes in order to use monitoring instruments, such as radiation, metal and current detectors.
- 10. Communicate effectively and organize thoughts to prepare written documents that are correct in style, grammar, and mechanics.
- 11. Comprehend applied and abstract concepts from the humanities and from chemical, physical, biological, social, behavioral, political, and managerial sciences, and convert them to daily application in environmental health management.



#### MS Program in Community/Environmental Health

Students admitted to the graduate program in community and environmental health are expected to complete all program requirements. Any student who thinks he or she does not possess one or more of the following skills should seek assistance from the program director or faculty advisor and contact the Educational Accessibility office concerning any needed flexibility in program requirements and possible accommodation through technical aids and assistance. Students are expected to:

- 1. Assimilate knowledge acquired through lectures, discussions, demonstrations and readings and make appropriate judgments/decisions in a timely manner during clinical practice.
- 2. Comprehend and apply basic mathematical skills, e.g. ratio and proportion concepts, use of conversion tables, calculation of drug dosages.
- 3. Demonstrate competence in concepts from biological, chemical and physical sciences.
- 4. Communicate effectively (verbally and non-verbally) and prepare written documents that are correct in style, grammar and mechanics. Communicate effective oral presentations to a variety of audiences.
- 5. Sufficient typing skills to prepare technical reports and documentation using a computer.
- 6. Read charts, records, scales, fine print, handwritten notations and distinguish colors.
- 7. Differentiate changes in sensation, e.g. temperature, texture.
- 8. Handle equipment necessary for environmental hazard detection and analysis.
- 9. Perform and interpret laboratory assays, including the ability to distinguish color and odors.
- 10. Read, understand and follow directions printed in English.
- 11. Emotional stability and maturity when confronted with stressful and rigorous circumstances.



#### Students in the COHS Undergraduate BSHS Program

Since many of our students are transfer students from the Virginia Community College System, it is important that their general education requirements are met. Completion of the required general education requirements enhance the students' knowledge and skills in preparation for the higher-level courses. For example, completion of the writing intensive course within the major is preparation for upper level courses. Other general education courses must be taken prior to the higher-level courses as prerequisites. There are some upper elective courses in the program that serve as 'double duty' --That is, fulfilling the requirement for general education requirements as well as fulfilling the requirement for the upper elective courses.

Students admitted into the program are expected to successfully complete all program requirements, including an internship. All student outcomes are expected to be met for successful program completion, and if the learning outcomes are not demonstrated, faculty is expected to take appropriate actions. Students are made aware of university assistance programs in the course syllabus, if there is a need for accommodations for support of learning.

All students who successfully complete the program are to demonstrate the following behaviors:

- 1. Can apply analytical skills and address issues of selected population and global health care issues in their social, cultural, economic, and political contexts.
- 2. Demonstration of reading and writing skills that is reflective of a college educated person.
- 3. Demonstration of effective and appropriate communication skills.
- 4. Can apply knowledge about the issues of ethics and confidentiality as it relates to health care services.
- 5. Can write point papers, cost benefit analysis papers, and research issue papers.
- 6. Demonstration of knowledge and skills for an entry level managerial position or enhanced knowledge and skills for those with experience.
- 7. Present a professionally prepared PowerPoint presentation pertaining to health administration services.
- 8. Application of theories and models of management to work scenarios in the health care environment.
- 9. Demonstration of an understanding of healthcare finance and budgeting.
- 10. An application of principles and theories of public/community health to the health services workplace.
- 11. Demonstrate skills and knowledge expected of professionally prepared health services administrators and entry level public health workers.



#### Health Services Research Doctoral Program

Students admitted to the Health Services Research program can be expected to complete all program requirements. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor, faculty advisor, and Office of Educational Accessibility. The student will be advised on flexibility in program requirements and possible accommodation through technical aids and assistance. The student will be expected to:

- 1. Assimilate knowledge acquired through lectures, discussions, demonstrations, and readings andmake appropriate judgments/decisions in a timely manner during class or internship experience.
- 2. Comprehend and apply mathematical and statistical techniques which many include reading tables, charts, graphs, scales, small print, handwritten and notations.
- 3. Distinguish colors accurately for reading charts, records, and papers during assignment completion and conduct of research.
- 4. Demonstrate competence in applying concepts from biological, sociological, and psychological sciences in the practice and application of health services research.
- 5. Communicate (verbally and non-verbally) effectively and organize thoughts to prepare written documents that are correct in style, grammar, and mechanics.
- 6. Interpersonal rapport with individuals, families and community groups who have a wide variety of social, emotional, intellectual and cultural differences.
- 7. A student may be requested to have a criminal background and sex offender status verification completed prior to beginning the internship experience. Agencies may request to review the results and, based upon the review, reserve the right to prohibit a student from participating in the internship experience at that facility. Inability to complete the internship experience due to a criminal record will be cause for dismissal from the program.



# School of Dental Hygiene Bachelor of Science in Dental Hygiene Entry-level Program

Students admitted to the dental hygiene program are expected to complete course requirements, which necessitate attendance to all course modalities including online and/or in person didactic courses, in person laboratory and clinic and off campus community rotations as well as the physical and mental abilities listed below. Deficiencies in knowledge, skill, judgment, integrity, ethical behavior, character, professional attitude or demeanor which mayjeopardize patient care and/or safety may be grounds for course failure and dismissal from the Program. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Office of Educational Accessibility concerning possible accommodations through technical aids and assistance:

- Assimilate applied and theoretical concepts and relationships, which are communicated through lectures, demonstrations, laboratory exercises, practice, independent study and problem solving.
- 2. Comprehend and apply theoretical concepts from biomedical, psychosocial and dental hygiene sciences to clinical and laboratory dental hygiene procedures.
- 3. Communicate in English in person and using a telephone and computer.
  - Students must be able to communicate effectively with peers, patients/clients and faculty/staff. A student must be able to communicate clearly with patients in order to elicit accurate and complete medical history information, describe assessment and radiographic findings, provide oral hygiene instructions and explain treatment plans, as well as perceive verbal and nonverbal communications.-
  - Students must be able to establish interpersonal rapport in interactions with individuals, families and community groups who have a wide variety of social, emotional, intellectual and cultural differences.
  - Communication includes not only speech, but also reading and writing. Dental
    Hygiene education presents challenges in the volume and breadth of required
    reading and the necessity to impart information to others. Writing should be
    organized and developed with expression, sentence structure, spelling, word
    usage and punctuation for reports, charts and correspondence.

Students must be able to communicate quickly, effectively and efficiently in oral and written English with all members of the health care team. Specific requirements include but are not limited to the following abilities: communicating rapidly and clearly with patients; eliciting a thorough medical history from patients; and communicating complex findings in appropriate terms to patients and to



various members of the health care team.

- Each student must be able to read and record observations and plans efficiently and accurately in documents such as the electronic health record. Students must be able to complete forms according to directions in a complete and timely fashion.
- 4. Possess manual dexterity to hold and manipulate small items with fine motor controlmovements.
- 5. Discriminate between shades of gray, black and white in order to be able to read radiographs.
- 6. Detect and distinguish hard and soft tooth deposits, tooth and root anatomy and performmanual palpation and pulse exams.
- 7. Distinguish sounds to detect proper equipment functioning and blood pressure exams.
- 8. Possess excellent corrected visual acuity and the ability to see color, shape, texture, depth and color of oral tissues and intra- and extra oral abnormalities.
- 9. Possess the ability to bend, twist, reach, push and pull, have foot control to operate dentalequipment and execute client care.
- 10. Possess ability to use olfactory senses (sense of smell) to recognize harmful drugs and hazardous chemicals)
- 11. Effectively utilize and maneuver equipment in a clinical setting.
- 12. Exercise sound judgment to achieve mature, sensitive, courteous, respectful, supportive andeffective relationships with others.
- 13. Demonstrate ability to deal with high levels of stress in didactic and clinical curricula.
- 14. Perform cardiopulmonary resuscitation techniques and other emergency response skills.
- 15. Demonstrate ability to plan and conduct clinical research or library reviews including datacollection, analysis and report writing.
- 16. Possess ability to wear and tolerate necessary personal protective equipment (PPEs) inlaboratory, clinical and community settings including a medical clearance and fit testing for N95 respirator mask.
- 17. Demonstrate accountability, organization, preparation, and time management skills to meet responsibilities to self and others, and required deadlines and attendance.
- 18. Possess computer skills to access, prepare and deliver class assignments. Attendance in online courses require professional attire, web camera turned on with ODU approved zoom background and ability to use microphone/audio on a personal computer.



#### Kinesiology & Rehabilitation Doctoral Program

Students admitted to the Kinesiology & Rehabilitation Ph.D. program can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Comprehend theoretical concepts, assimilate large amounts of material communicated through lectures, discussions, and readings, and apply concepts to actual problems.
- 2. Comprehend and apply basic mathematical skills (e.g., ratio and proportion concepts, algebraic equations, and basic statistical equations).
- 3. Observe and distinguish characteristics of human movement.
- 4. Read, distinguish and comprehend data presented in tables and figures in gray scale and colors.
- 5. Communicate orally in a clear and grammatically correct manner.
- 6. Communicate effectively in written documents that are correct in grammar, style and mechanics.
- 7. Safely operate mechanical and electronic instrumentation employed in recording human movement.
- 8. Operate computers, including the use of pre-installed statistical, data collection, data analysis, word processing, graphical and presentation software.
- 9. Think logically and apply reason to reach a conclusion, based on theoretical concepts and experimental data.



#### School of Nursing

The goal of the School of Nursing's programs is to prepare exceptional nurses who think critically, and practice nursing competently and compassionately in rapidly changing practice environments. All efforts are designed to build nursing knowledge, enhance nursing practice and patient safety, foster professional integrity, and ultimately improve the health outcomes of patients, families, communities and global environments across the continuum of care. Old Dominion University School of Nursing is committed to the policy that all persons shall have equal access to its programs, facilities and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status or sexual orientation.

The School of Nursing curricula require students to engage in diverse, complex and specific experiences essential to the acquisition and practice of essential nursing skills and functions. A unique combination of cognitive, affective, psychomotor, physical, and social abilities is required to satisfactorily perform these functions. In addition, specific functional abilities are essential for the delivery of safe, effective nursing care during clinical training activities. Therefore, the faculty has determined that particular technical standards are requisite for admission, progression, and graduation from the nursing programs.

In addition to classroom learning, the clinical learning that occurs throughout the respective programs involves certain considerations (such as patient safety, preceptor experiences and clinical facilities) that are not relevant to classroom accommodations. The School has established technical standards, based in part on the Quality and Safety Education for Nurses Competencies (Cronenwett, L. et. al., (2007). Quality and safety education for nurses. Nursing Outlook, 55, 122-131. /doi.org/10.1016/j.outlook.2007.02.006), in an effort to provide a framework to balance several competing interests:

- The rights of applicants and students.
- The safety of students, their co-workers and patients.
- The significant clinical component of the School curricula.
- The requirements imposed on the School by the Commission on Collegiate Nursing Education, the accrediting body, and by clinical agency agreements that allow the School to place students in various health care organizations for clinical education.
- The requirements of clinical facilities.
- The conditions for licensure of School graduates.

These competing interests and the nature of nursing educational activities may prevent some prospective students with disabilities and students with disabilities from qualifying for enrollment or continued enrollment, and may limit access to the academic program of the School of Nursing.



For this reason, any applicant or student who seeks accommodations prior to or immediately after enrolling in the nursing programs must also request an assessment of the types of reasonable accommodations needed for the clinical component of the program and work with the Office of Educational Accessibility. Old Dominion University School of Nursing will make appropriate academic adjustments to facilitate enrollment and participation of qualified individuals with temporary or permanent disabilities.

An individual must be able to independently, with or without reasonable accommodation, meet the following technical standards of general abilities and those specifically related to (1) observation; (2) communication; (3) senses; (4) motor; (5) intellectual-conceptual, integrated and quantitative abilities; and (6) essential behavioral, interpersonal and social attributes. Individuals seeking admission to graduate nursing programs should be able to perform in a reasonably independent manner *without a trained intermediary*. The use of a trained intermediary means that a candidate's judgment or performance must be mediated by someone else's power of selection, observation, or performance. Individuals unable to meet these technical standards, with or without reasonable accommodation, will not be able to complete the program and are counseled to pursue alternatecareers.

#### **Observation Competencies**

The Technical Standards include the ability to accurately process visual, auditory, tactile and olfactory information in a meaningful way. 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.

Examples of observation competencies include, without limitation, the ability to:

- Accurately observe a patient during the course of a comprehensive or focused health
  assessment and interventions; obtain diagnostic specimens and information from digital,
  analog and waveform representations of physiologic phenomena observe and interpret a
  patient's heart and body sounds, body language, color of wounds, drainage, urine, feces,
  expectoration, and sensitivity to heat, cold, pain, and pressure to determine a client's
  condition.
- Observe the patient accurately, at a distance or close at hand, and observe and appropriately interpret non-verbal communication when performing nursing assessment and intervention or administering medications.
- Gather data from written and electronic reference materials, oral presentations, demonstrations and observations of a patient and the patient's environment.

#### **Communication Competencies**

The Technical Standards include the ability to communicate effectively and sensitively with students, faculty, staff, patients/clients, family and other professionals.



Examples of communication competencies include, without limitation, the ability to:

- Communicate clearly and intelligibly in English (or to a patient language interpreter if the
  patient and/or family members/significant others do not speak English) in oral, written
  and electronic forms in a professional and sensitive manner with patients and their
  family members/significant others, health team members, faculty, and peers of diverse
  ethnic, religious, and cultural backgrounds in professional nursing practice settings as
  well as in the academic setting.
- Read and write in the English language at a level sufficient to retrieve information from literature, computerized data bases and lectures.
- Process and communicate information on the patient's status with accuracy in a timely manner to members of the health careteam.
- Make correct judgments regarding patient care, seeking supervision and consultation in a timely manner when indicated.
- Use and comprehend standard professional nursing and medical terminology when using and/or documenting a patient's print or electronic health record.
- Demonstrate a willingness and ability to give and receive feedback.
- Convey appropriate information to patients and the health care team and teach, direct and counsel a wide variety of individuals, including explaining treatment procedures and initiating health education.
- Perceive, interpretand respond to non-verbal communication. 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.
- Provide in-depth rationale for plans of care for individuals and groups.
- Communicate in a mature, professional, culturally sensitive, therapeutic, accurate and
  effective manner with patients, patients' family members/significant others, members of
  the health care team, faculty, staff, and peers.

#### **Senses Competencies**

The Technical Standard includes the ability to use the senses of vision, touch, hearing, and smell so that data received by the senses may be integrated, analyzed, and synthesized in a consistent and accurate manner.

Examples of this competency include, without limitation, the ability to:

Hear and interpret people's communication in a noisy environment and correctly
interpret what is heard; i.e., physicians' orders (verbal or over telephone), patient
complaints, physical assessment (especially heartand
other body sounds), fire and equipment alarms, and when unable to see lips such as when
masks are used.



- Perceive pain, pressure, temperature, position, vibration, and movementthat are important to the ability to gather significant information needed to effectively evaluate patients.
- Utilize visual skills necessary to detect signs and symptoms, body language of patients, color of wounds, drainage and possible infections as well as colors associated with various health care alertingsystems.
- Interpret the written word and read characters and identify colors on the computer screen accurately.
- Recognize through touch differences in size and shapes, surface characteristics, as well as palpable changes in various organs and tissues.
- Detect odors from the client (i.e. foul smelling drainage, alcohol or fruity breath, abnormal odors from body fluids, etc.), smoke, and gases or noxious smells.
- Gather data from written reference materials, oral presentations, demonstrations, simulations and observations of a patient and his/her environments.

#### **Motor Competencies**

The Technical Standards include sufficient motor ability to execute movements required to perform or assist with nursing interventions, to provide comprehensive general nursing care and treatment in connection with other identified professional nursing student competencies in all health care settings.

Examples of motor competencies include, without limitation, the ability to:

- Demonstrate the psychomotor skills reasonably needed to perform or assist with
  procedures, treatments, administration of medication, management and operation of
  diagnostic and therapeutic medical equipment and administering basic life support (BLS),
  and/or the specialty's scope of practice as defined by the relevant accrediting organization,
  depending upon the nursing student's respective program.
- Perform motor activities such as walking, lifting patients, bending, flexing, twisting, kneeling, pulling, stretching, pushing, carrying, reaching, typing, writing, gripping, squatting, standing and sitting actions repeatedly during clinical experiences that may last up to twelve hours in duration. Ability to frequently lift, carry or move objects weighing up to 60 pounds. Must be able to assist with patient positioning, transferring, or transporting, which requires lifting in excess of 40 pounds.
- Perform gross and fine motor movements with sufficient coordination to perform comprehensive physical examinations utilizing the techniques of inspection, palpation, percussion, auscultation, and other diagnostic maneuvers that monitor or assess physiological phenomena or data.
- Utilize fine and gross muscular movements to treat patients in emergency situations. Emergency situations include any circumstance requiring an immediate intervention.

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- Navigate patients' rooms and or homes, work spaces, and treatment areas with appropriate precision and speed to carry out the nursing process during the delivery of general nursing care or, in emergency situations, without hindering the ability of other members of the health care team to provide prompt treatment and care topatients.
- Possess sufficient levels of neuromuscular control and eye-to-hand coordination, as well as
  possess the physical and mental stamina, to meet the demands associated with extended
  periods of sitting, standing, moving, and physical exertion required for satisfactory and safe
  performance in the clinical and classroom settings, including performing CPR, if necessary.
- The Graduate Nurse Anesthesia Student should be able to:
  - Execute motor activities reasonably required to provide general care, to perform
    direct laryngoscopy, arterial and venous line placement, and performance of
    peripheral and central nerve blocks, anesthesia gas machine operation and
    troubleshooting, to provide emergency and urgent treatment to patients such as
    fiberoptic intubation and therapies of the difficult airway algorithm, and stand and
    sit for long periods of time.
  - Participate in clinical internship with several mandatory rotations requiring
    extended hours, with start times as early as 5:00 am. Evening, on-call and weekend
    shifts are common; students must be able to physically and psychologically perform
    capably and competently beyond a 12-hour shift.

#### **Intellectual-Conceptual, Integrative and Quantitative Competencies**

The Technical Standards include the ability to measure, calculate, reason, analyze, integrate and synthesize in the context of nursing study in connection with the other identified professional nursing student competencies. Examples of intellectual-conceptual competencies include, without limitation, the ability to:

- Quickly read and comprehend extensive written material and electronic data as well as
  evaluate and apply information and engage in critical thinking in the classroom, laboratory
  and clinical setting.
- Rapidly problem solve various situations after considering alternatives; independently
  assess and interpret health care data and make decisions for managing or intervening in the
  care of a patient to formulate a logical plan of care. The process of problem-solving involves
  the abilities to measure, calculate, reason, analyze, and synthesize objective and subjective
  data, and to make decisions, often in a time urgent environment, that reflect consistent and
  thoughtful deliberation and sound clinical judgment.
- Process and understand information, comprehend three-dimensional relationships, and retain and recall pertinent information in a timely fashion, demonstrating the ability to establish a plan of care, set priorities, and make decisions reflecting consistent and thoughtful analysis of appropriate information.

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- Demonstrate the ability to incorporate new information from peers, faculty, and the nursing and health care literature to formulate sound judgment in patient assessment, intervention, evaluation, teaching, and setting shortand long term goals.
- Retrieve and critically appraise patient-related research to determine the best available research evidence (quantitative and qualitative) to use in a patient's nursing plan of care to promote positive patient outcomes.
- Accurately follow course syllabi, assignment directions, patient protocols, and any action plan(s) developed by deans, faculty, administrators, or health care agency staff.
- Precisely measure, calculate, reason, analyze and synthesize medication/solution dosages and any other essential information specific to patientcare in a timely manner.
- The graduate nursing student must be able to, with or without the use of assistive devices, but without reliance on another person, interpret x-ray and other graphic images and digital or analog representations of physiologic phenomenon (such as EKGs).

#### **Essential Behavioral, Interpersonal and Social Competencies**

The Technical Standards include the ability to demonstrate behavioral and social attributes in academic and in on-campus clinical (simulation) and off-campus clinical settings in alignment with professional nursing student competencies stipulated in the <u>AACN's Essentials of Baccalaureate, Master's and Doctoral Education for Professional Nursing Practice</u>, National Student Nurses' Association, Inc.® Code of Ethics: Part II Code of Academic and Clinical Conduct and Interpretive Statements and or the American Nurses Association Code of Ethics with Interpretive Statements.

Examples of behavioral and social attributes competencies include, without limitation, the ability to:

- Conform to all requirements set forth by ODU/health care agency affiliation agreements as well as any additional requirements of any clinical setting. In addition, must be able to uphold professional nursing standards related to the student's scope of practice.
- Improvements In European European Function effectively under physically taxing workloads, and in times of physical and mental stress, and able to provide safe nursing care workwithin environments with multiple interruptions and noises, distractions, and unexpected patient needs.
- Adapt to ever-changing environments by displaying flexibility and composure, and function effectively during uncertain and stressful situations inherent in clinical situations involving diverse clients and families.
- Interact effectively in the clinical setting with other members of the healthcare team; and function cooperatively and efficiently in the face of the uncertainties inherent in clinical practice.
- Receive and integrate constructive criticism regarding performance and respond with appropriate modification of behavior.
- Compassionately and professionally provide sensitive care for patients and families whose values, beliefs or practices differ from their own.



- Conform to ODU's attendance and clinical dress code/professional appearance requirements for on-campus clinical simulation and off-campus clinical learningsessions.
- Exercise stable, sound judgment in completing assessment and interventional activities.
- Establish rapport and maintain appropriate professional relationships with patients, patients' family members/significant others, peers, groups, faculty, staff, and other health care professionals from a variety of social, emotional, cultural and intellectual backgrounds.
- Work cooperatively and with honesty and professional integrity at all times with peers, faculty, and members of the healthcareteam.
- Demonstrate effective conflict resolution strategies in the University, the classroom, in on-campus clinical simulation, and off-campus clinical experiences.
- Correctly assess when a nursing intervention requires additional assistance and use good judgment in seeking help from the faculty, preceptor, or appropriate agency health care teammembers.
- Employ the skills required for full utilization of the student's intellectual abilities and the prompt completion of all responsibilities in the classroomand clinical settings.



#### Medical Technology/Medical Laboratory Science Program

Technical standards represent the essential functions that students must master to successfully complete program requirements. Standards for this program are listed below:

#### Students must be able to:

- 1. Perform laboratory assays and tasks with coordination and control.
- 2. Manipulate small objects and devices.
- 3. Turn dials, press buttons and keypads, and move switches.
- 4. Maneuver around instruments in the laboratory and in patient care settings.
- 5. Perform and interpret laboratory assays, including the ability to: distinguish red, yellow, blue, and other color reactions; distinguish between solutions that are clear, cloudy or particulate; identify stained and unstained cellular and non-cellular components in the range of 1 mm using a microscope, and; read calibration lines or scales that range 1 mm apart.
- 6. Perform tasks and assays that require responses to auditory stimuli.
- 7. Perform phlebotomy, blood and body fluid processing, and analytical procedures safely.
- 8. Perform laboratory assays and interpret results, including the ability to communicate effectively in English, both in written and non-written forms.
- 9. Read, understand, and follow directions printed in English.
- Maintain program cognitive, psychomotor, and affective performance standards while retaining intellectual and emotional stability and maturity when confronted with stressful and rigorous circumstances.



#### Cytotechnology

Technical standards represent the essential non-academic requirements of the program that students must master to successfully participate in the program and become employable. The following is a list of the technical abilities and skills applicants for admission must possess:

- 1. Manual Dexterity: Ability to use hand(s) or prosthetic devices with coordination.
- 2. Fine Motor: Ability to manipulate small objects with fingertips or adaptive devices.
- 3. Vision: Ability to distinguish red, yellow, and blue colors; distinguish clear from cloudy; and distinguish objects through a microscope.
- 4. Concentration: Ability to sit and concentrate visually for prolonged periods.
- 5. Writing: Ability to communicate effectively in the written form in English.
- 6. Reading: Ability to read, understand, and follow directions printed in English.



#### **Nuclear Medicine Technology Program**

Nuclear medicine technology involves the provision of direct care for individuals and is characterized by the application of verified knowledge and skillful performance in the medical imaging domain. You must meet the following technical standards to be admitted into the clinical phase of the NMED program.

An NMED student must function in a broad variety of clinical situations and therefore, students admitted to the program must meet the following abilities, expectations and technical skills. Students must be able to tolerate physical (standing for long periods of time, moving and lifting patients, etc.) and emotional stressors (occasional high workload/multitasking, emergency orders, etc.) while functioning effectively and compassionately with the ill and injured.

#### Students, therefore must:

- 1. Possess sufficient skills in order to communicate with individuals promptly and effectively through speaking, reading and writing.
- 2. Possess sufficient skills in order to accurately prepare and administer radiopharmaceuticals and operate sensitive imaging equipment.
- 3. Possess sufficient skills in order to observe, assess, and care for patients.
- Possess sufficient skills in order to respond promptly, manipulate equipment, position and lift of
  patients as required to compassionately meet the healthcare needs related to nuclear medicine
  imaging.
- 5. Possess sufficient skills in order to perceive verbal communication from patients and others in the health care system and to assess the health needs of individuals through the use of monitoring devices such as cardiac monitors, stethoscopes, intravenous infusion pumps, and other monitoring and imaging devices.



# School of Physical Therapy and Athletic Training Athletic Training Program

Applicants/Students admitted to the MSAT program must possess aptitudes, abilities, and skills in the following five areas:

#### 1. Observation

- a. Students must be able to use vision, hearing, and somatic sensations in both the classroom and in patient care. A student must be able to observe a patient accurately at a distance and close at hand, noting nonverbal as well as verbal signals.
- b. Specific vision-related requirements include, but are not limited to the following abilities: skin integrity; discriminating findings on radiographs and other imaging tools; reading written and illustrated material; observing demonstrations in the classroom, including multimedia presentations; observing and differentiating changes in body movement; observing anatomic structures; discriminating numbers and patterns associated with diagnostic instruments and tests, such as sphygmomanometers and electrocardiograms.

#### 2. Communication

- a. Students must be able to communicate effectively and sensitively with peers, patients/clients and faculty/staff. A student must be able to communicate clearly patients in order to elicit information, describe accurate changes in mood, activity and posture, and perceive verbal as well as nonverbal communications.
- b. Communication includes not only speech, but also reading and writing. Athletic Training education presents challenges in the volume and breadth of required reading and the necessity to impart information to others.
- c. Students must be able to communicate quickly, effectively and efficiently in oral and written English with all members of the health care team. Specific requirements include but are not limited to the following abilities: communicating rapidly and clearly with the medical team on rounds; eliciting a thorough history from patients; and communicating complex findings in appropriate terms to patients and to various members of the health care team.
- d. Each student must be able to read and to record observations and plans efficiently and accurately in documents such as the patient record. Students must be able to complete forms according to directions in a complete and timely fashion.

#### 3. Sensory and Motor Function



- a. Students must elicit information from a patient examination including but not limited to: palpate pulses and body tissues, feel resistance to movement, discern hot and cold, and auscultate (listen) lungs and heart.
- A student must have adequate gross motor function (movement, strength, balance and coordination) to perform such tasks as assistance with gait, moving and positioning patients.
- c. A student must have adequate fine motor function to manipulate instruments such as a sphygmomanometer, goniometer, and therapeutic equipment.
- d. Students must have sufficient motor function to serve as a first responder, including maintaining in-line stabilization of the cervical spine, rescue breathing, airway management and cardiopulmonary resuscitation.

#### 4. Intellectual Abilities and Critical Reasoning Skills

- a. Abilities include measurement, calculation, reasoning, analysis, judgment, numerical recognition and synthesis. Problem solving, a critical skill demanded of athletic trainers, requires all of these intellectual abilities, and must be performed quickly, especially in emergency situations.
- b. Students must be able to identify significant findings from history, physical examination, and laboratory data, provide a reasoned explanation for plan of care while recalling and retaining information.
- c. The ability to incorporate new information from peers, teachers, and the medical literature in formulating treatment and plans is essential.

#### 5. Behavioral Attributes

- a. Empathy, integrity, honesty, concern for others, good interpersonal skills, interest and motivation are all personal qualities that are required.
- b. Students must possess the emotional health required for full use of their intellectual abilities, the exercise of good judgment, the prompt completion of all responsibilities, and the development of mature, sensitive and effective relationships with peers, patients/clients and faculty/staff. At times, this requires the ability to be aware of and appropriately react to one's own immediate emotional responses. For example, students must maintain a professional demeanor and organization during physically and mentally taxing workloads.
- c. Students must be able to develop professional relationships with patients and the healthcare team. Students are expected to accept appropriate suggestions and criticism in a respectful manner and if necessary, respond by modification of behavior.



d. Students must demonstrate ethical behavior, both in the classroom and during their clinical experience. (National Athletic Trainers' Association Code of Ethics)

#### **ACCOMODATIONS**

It is the policy of Old Dominion University to provide reasonable accommodation to qualified students with a disability who can perform the essential functions as outlined in the above technical standards. Reasonable accommodation may be made in the form of administration of the evaluation where necessary; documented and requested in advance in accord with standards and requirements of the Americans with Disabilities Act Amendments (ADAAA). Whether or not a request accommodation is reasonable will be determined on an individual basis. Determining what is a reasonable accommodation is an interactive process which the student/applicant should initiate with the Office of Educational Accessibility (<a href="https://www.odu.edu/educationalaccessibility">https://www.odu.edu/educationalaccessibility</a>), in collaboration with the Office of Institutional Equity and Diversity and the college or department of the Athletic Training Program.



#### School of Physical Therapy

These technical standards describe essential functions needed to complete the educational program and perform the job of a physical therapist. An individual not possessing one or more of these capabilities will not be admitted to the program unless reasonable accommodations can be made that allow the person to perform all required tasks within a standard period of time used in the profession.

Deficiencies in knowledge, skill, judgment, integrity, character, professional attitude or demeanor which may jeopardize patient care and/or safety may be grounds for course/internship failure and possible dismissal from the Program.

Applicants/Students admitted to the DPT program must possess aptitudes, abilities, and skills in the following five areas:

#### 1. Observation

Students must be able to observe and identify anatomic structures to distinguish different tissues in a limited time period. A student must be able to observe a patient accurately at a distance and close at hand, noting nonverbal as well as verbal signals. Specific vision-related requirements include, but are not limited to the following abilities: skin integrity; visualizing and discriminating findings on radiographs and other medical imaging tools; reading written and illustrated material; observing demonstrations in the classroom, including multimedia presentations; observing and differentiating changes in body movement; observing anatomic structures; discriminating numbers and patterns associated with diagnostic instruments and tests, such as sphygmomanometers and electrocardiograms, and using instruments competently, such as stethoscope, monofilaments, etc.

#### 2. Communication

Students must be able to relate effectively and sensitively with peers, patients/clients and faculty. A student must be able to communicate clearly with and observe patients in order to elicit information, describe accurately changes in mood, activity and posture, and perceive verbal as well as nonverbal communications. Communication includes not only speech but also reading and writing. Physical Therapy education presents exceptional challenges in the volume and breadth of required reading and the necessity to impart information to others. Students must be able to communicate quickly, effectively and efficiently in oral and written English with all members of the health care team. Specific requirements include but are not limited to the following abilities: communicating rapidly and clearly



with the medical team on rounds; eliciting a thorough history from patients; and communicating complex findings in appropriate terms to patients and to various members of the health care team (fellow students, physicians, nurses, aides, therapists, social workers, and others). Students must learn to recognize and respond promptly and appropriately to emotional communications such as sadness, worry, agitation, and lack of comprehension. Each student must be able to read and to record observations and plans legibly, efficiently and accurately in documents such as the patient record. Students must be able to prepare and communicate concise but complete summaries of individual encounters. Students must be able to complete forms according to directions in a complete and timely fashion.

#### 3. Sensory and Motor Coordination or Function

Students must have sufficient sensory function to palpate (touch/feel) pulses and body tissues, feel resistance to movement, discern hot and cold, and auscultate (listen) lungs and heart. A student must have adequate gross motor function (movement, strength, balance and coordination) to perform such tasks as cardiopulmonary resuscitation, lifting people's limbs, assistance with transfers and gait, moving and positioning patients, and getting down to and up from the floor without assistance. A student must have adequate fine motor function to manipulate instruments such as a sphygmomanometer, goniometer, and therapeutic modality equipment. Students must be able to respond promptly to urgencies within the hospital or clinic, and must not hinder the ability of co-workers to provide prompt care.

#### 4. Intellectual-Conceptual Integrative and Quantitative Abilities

These abilities include measurement, calculation, reasoning, analysis, judgment, numerical recognition and synthesis. Problem solving, a critical skill demanded of physical therapists, requires all of these intellectual abilities, and must be performed quickly, especially in emergency situations. Students must be able to identify significant findings from history, physical examination, and laboratory data and graphs, provide a reasoned explanation for likely therapy, recalling and retaining information in an efficient and timely manner. The ability to incorporate new information from peers, teachers, and the medical literature in formulating treatment and plans is essential. Good judgment in patient assessment, diagnostic and therapeutic planning is essential; students must be able to identify and communicate the limits of their knowledge to others when appropriate.



#### 5. Behavioral Attributes

Empathy, integrity, honesty, concern for others, good interpersonal skills, interest and motivation are all personal qualities that are required. Students must possess the emotional health required for full use of their intellectual abilities, the exercise of good judgment, the prompt completion of all responsibilities, and the development of mature, sensitive and effective relationships with peers, patients/clients and faculty. At times, this requires the ability to be aware of and appropriately react to one's own immediate emotional responses. For example, students must maintain a professional demeanor and organization in the face of long hours and personal fatigue, dissatisfied patients, and tired colleagues. Students must be able to develop professional relationships with patients, providing comfort and reassurance when appropriate while protecting patient confidentiality. Students must possess adequate endurance to tolerate physically taxing workloads and to function effectively under stress. Students must be able to adapt to changing environments, display flexibility and learn to function in the face of uncertainties inherent in the clinical problems of many patients. Students are expected to accept appropriate suggestions and criticism in a respectful manner and if necessary, respond by modification of behavior.



#### Graduate Program in Public Health

- 1. Observation Skills Technical Standards
  - a. Demonstrate sufficient attention and accuracy in observation skills (visual, auditory, and tactile) in the lecture hall and/or online settings. Indicators include, but are not limited to, accurate visualization and discrimination of text, numbers, patterns, graphic illustrations, and other imaging texts.
- 2. Communication Skills Technical Standards
  - a. Students must be able to communicate with faculty, colleagues and the target audience with whom they work.
  - b. Indicators include, but are not limited to, these examples:
    - i. Clear, efficient, and intelligible articulation of verbal language
    - ii. Legible, efficient, and intelligible written English language.
    - iii. Accurate and efficient English language reading skills.
    - iv. Accurate and efficient expressive and receptive communication skills.
    - v. Ability to accurately follow oral and written directions.
- 3. Critical Reasoning Skills Technical Standards
  - a. Abilities include measurement, calculation, reasoning, data analysis and synthesis.
  - b. Students must have the intellectual capability to improve their knowledge based upon standard textbooks, conferences, lectures, current scholarly literature and journals.
  - c. Demonstrated problem-solving and critical thinking skills are necessary.
  - d. Demonstrate ability to acquire, retain and apply new and learned information.
  - e. Indicators include, but are not limited to, these examples:
    - i. Demonstrate ability to evaluate the effectiveness of community health intervention programs.
    - ii. Demonstrate ability to analyze and interpret data using basic statistical tests, measures of disease occurrence and association.
- 4. Motor And Sensory Function Technical Standards
  - a. Students should have sufficient motor functions to be able to execute movements reasonably required to complete their public health education.
  - b. Indicators include, but are not limited to, this example:
    - i. Physical stamina sufficient to complete the rigorous course of didactic and clinical study, which may include prolonged periods of sitting or standing.
- 5. Behavioral And Social Attributes Technical Standards



- a. Students must possess the emotional health required for adequate utilization of intellectual abilities, the exercise of good judgment and evidence of mature and sensitive relationships with faculty, colleagues and the public.
- b. Evidence of integrity, ethical standards and concern for others, as well as appropriate appearance and hygiene, interpersonal skills, interest and motivation are all personal qualities that will be assessed during the admission process and throughout the educational progression through the curriculum.
- c. Indicators include, but are not limited to, these examples:
  - i. Demonstrate impartial motives, attitudes and values in roles, functions and relationships.
  - ii. Ability to monitor and react appropriately to one's own emotional needs and responses.
  - iii. Display appropriate flexibility and adaptability in the face of stress or uncertainty.



#### **ACCOMMODATIONS**

It is the policy of Old Dominion University to provide reasonable accommodation to qualified students with a disability who can perform the essential functions as outlined in the above technical standards. Reasonable accommodation may be made in the form of administration of the evaluation where necessary; documented and requested in advance in accord with standards and requirements of the Americans with Disabilities Act Amendments (ADAAA). Whether or not a requested accommodation is reasonable will be determined on an individual basis. Determining what is a reasonable accommodation is an interactive process which the candidate/student should initiate with the Office of Educational Accessibility, in conjunction with the Office of Institutional Equity and Diversity and the respective department.



### **COLLEGE OF SCIENCES**



Department of Biological Sciences B.S. and M.S. Programs in Biology Ph.D. in Biomedical Sciences

Students admitted to the B.S. program in biology, the M.S. program in biology or the Ph.D. program in biomedical sciences can be expected to complete course requirements, which necessitate the physical and mental abilities, listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Comprehend and apply basic mathematical skills (e.g., ratio and proportion concepts, algebraic equations, and basic statistical equations).
- 2. Communicate effectively and in written documents that are correct in grammar, style and mechanics.
- 3. Observe biological behavior and other phenomena with and without the aid of a microscope.
- 4. Identify characteristic odors of organisms and chemicals used in biological experimentation and field analysis.
- 5. Distinguish tonal differences and changes used in biological experimentation and field analysis.
- 6. Detect texture and topographic differences used in biological experimentation and field analysis.
- 7. Use equipment to perform biological experimentation (e.g., manipulating syringes or pipettors, setting field traps, mictrotoming, etc.).
- 8. Maneuver in laboratories to utilize equipment.
- 9. Develop and perform extensive biological experiments.



### Department of Biological Sciences Ecological Sciences Program

Students admitted to the ecological sciences program can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Understand and apply theoretical concepts in biology, ecology, and the mathematical sciences.
- 2. Read instruments and examine specimens.
- 3. Operate instruments, such as pH meters, oxygen meters, calorimeters, colorimeters, grinding mills.
- 4. Maneuver in and traverse difficult terrain in the field.
- 5. Communicate effectively and in written documents that are correct in grammar, style and mechanics.



# Department of Chemistry and Biochemistry Biochemistry Program

Students admitted to the undergraduate biochemistry program can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Apply theoretical concepts to practical problems using techniques in the development of explanations which fit observed experimental data.
- 2. Operate complex instrumentation used in biochemical studies.
- 3. Communicate effectively in written documents that are correct in grammar, style and mechanics.
- 4. Communicate orally in a clear and grammatically correct manner.
- 5. Identify characteristic colors and any other visual indication of a process that is occurring in a laboratory.
- 6. Be able to hear signals that may indicate the tuning of an instrument or serve as a warning of an event that is to occur.
- 7. Identify characteristic odors in the presence of potentially dangerous fumes, which might accumulate in the laboratory environment.



# Department of Chemistry and Biochemistry Chemistry Program – Teaching

Students admitted to the undergraduate chemistry program can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skill should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Apply theoretical concepts to practical problems using techniques in the development of explanations which fit observed experimental data.
- 2. Operate complex instrumentation used in chemical studies.
- 3. Communicate effectively in written documents that are correct in grammar, style and mechanics.
- 4. Communicate orally in a clear and grammatically correct manner.
- 5. Identify characteristic colors and any other visual indication of a process that is occurring in a laboratory.
- 6. Be able to hear signals that may indicate the tuning of an instrument or serve as a warning of an event that is to occur.
- 7. Identify characteristic odors in the presence of potentially dangerous fumes, which might accumulate in the laboratory environment.



# Department of Chemistry and Biochemistry Chemistry Program

Students admitted to the undergraduate chemistry program can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skill should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Apply theoretical concepts to practical problems using techniques in the development of explanations which fit observed experimental data.
- 2. Operate complex instrumentation used in chemical studies.
- 3. Communicate effectively in written documents that are correct in grammar, style and mechanics.
- 4. Communicate orally in a clear and grammatically correct manner.
- 5. Identify characteristic colors and any other visual indication of a process that is occurring in a laboratory.
- 6. Be able to hear signals that may indicate the tuning of an instrument or serve as a warning of an event that is to occur.
- 7. Identify characteristic odors in the presence of potentially dangerous fumes, which might accumulate in the laboratory environment.



### Department of Chemistry and Biochemistry B.S. and M.S. Programs in Chemistry Ph.D. in Biomedical Sciences

Students admitted to the B.S. program in chemistry, the M.S. program in chemistry, or the Ph.D. program in biomedical sciences can be expected to complete course requirements, which necessitate the physical and mental abilities, listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Comprehend quantitative information presented through graphs and mathematical equations and apply basic mathematical skills to the solution of quantitative problems relating to real and hypothetical systems.
- 2. Communicate effectively and in written documents that are correct in grammar, style and mechanics.
- 3. Operate instrumentation used in chemical laboratories without injury to self or others.
- 4. Identify characteristic odors in the presence of potentially dangerous fumes, which might accumulate in the laboratory environment.
- 5. Operate safely in a chemical laboratory environment.
- 6. Handle biological specimens, including preservative fixed animals and human cadavers.
- 7. Use dissection tools and perform dissections of specimens, both animal and human.
- 8. Stand for extended periods of time.
- 9. Perform work at workbench or dissecting table (Minimum heigh of 36-42")
- 10. Work in an area which contains low levels of formaldehyde, phenol, infutrace and other fixatives.



#### **Computer Science**

Students admitted to undergraduate and graduate computer science programs can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Apply theoretical concepts to practical problems using techniques to develop computer programs and interpret data.
- 2. Operate computers.
- 3. Think logically and in depth, particularly in the depiction of the flow and processing of data within computer programs.
- 4. Communicate effectively and in written documents that are correct in grammar, style and mechanics.



#### **Mathematics and Statistics Programs**

Students admitted to undergraduate and graduate mathematics and statistics programs are expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Comprehend theoretical concepts and apply them to hypothetical and actual problems.
- 2. Communicate effectively in written documents that are correct in grammar, fluent in style, and clear in mathematical and statistical models, mechanics and layout.
- 3. Operate personal or classroom styled computers safely and subject to university regulations, including the use of software pre-installed or updated for mathematical and statistical applications.
- 4. Comprehend and apply basic mathematical skills (e.g., ratio and proportion concepts, algebraic equations, and basic statistical equation).
- 5. Assimilate and communicate mathematical and statistical concepts through oral communication.
- 6. Be able to follow and formulate complex arguments involving abstract concepts in mathematics and statistics.
- 7. Apply the rules of logic and mathematical and statistical proofs for empirical evidence.



#### Department of Ocean, Earth and Atmospheric Sciences

Students admitted to the OEAS program can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinkshe/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Comprehend and apply theoretical concepts and relationships to complete projects and assignments.
- 2. Communicate effectively and in written documents that are correct in grammar, style and mechanics.
- 3. Organize diagrams and distinguish color.
- 4. Operate machinery and sophisticated instrumentation and use potentially dangerous chemicals without injury to self or others.
- 5. Conduct field investigations along beaches, coastlines and/or on-board underway research vessels.
- 6. Conduct independent field investigations.
- 7. Participate in cruises lasting several days on board research vessels at sea and/or on field trips to outcrop exposures.



### **Physics Department**

Students admitted to the undergraduate and graduate physics programs can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Assimilate theoretical concepts, using mathematical equations, texts, diagrams, and graphs to solve hypothetical and practical problems.
- 2. Assemble laboratory equipment, perform laboratory exercises, observe and evaluate results from laboratory experiments. Equipments may be of a mechanical, electrical or optical nature.
- 3. Operate standard test equipment used in physics laboratories and use computers. Be able to work with mathematical and standard software and possibly programming when appropriate, and assimilate data.
- 4. Operate electrical equipment which may have potentially lethal voltages and currents without injury to self or others.
- 5. Operate complex instrumentation used in introductory and advanced physics laboratories.
- 6. Distinguish loudness and tonal differences in laboratory experiments.
- 7. Communicate effectively in written documents. All written work is expected to demonstrate proper use of grammar, style and mechanics.
- 8. Assimilate and communicate physical concepts through oral communication.
- 9. Be able to follow and formulate complex arguments involving abstract concepts.



10. Apply the rules of logic, mathematical proofs and proper accounting for empirical evidence.



#### Psychology Department

Students admitted to the undergraduate and graduate psychology programs can be expected to complete course requirements, which necessitate the physical and mental abilities listed below. Any student who thinks he/she does not possess one or more of the following skills should seek assistance from an academic counselor or faculty advisor and Educational Accessibility concerning any flexibility in program requirements and possible accommodation through technical aids and assistance.

- 1. Comprehend theoretical concepts, assimilate large amounts of material communicated through lectures, discussions, and readings, and apply concepts to actual problems.
- 2. Comprehend and apply basic mathematical skills (e.g., ratio and proportion concepts, algebraic equations, and basic statistical equations).
- 3. Communicate orally in a clear and grammatically correct manner.
- 4. Communicate effectively in written documents that are correct in grammar, style and mechanics.
- 5. Operate computers, including the use of pre-installed statistical application, word processing, and presentation software.
- 6. Complete research studies and make oral presentations.
- 7. Use empirical and statistical analyses and manipulate complex data.
- 8. Think logically and apply reason to reach a conclusion.
- 9. Participate in class discussions.