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Appendix A ACSM Certified CEP Job Task Analysis Outline 27

**Practicum Handbooks are separate documents**
Program Description
The Master of Science in Kinesiology program prepares graduate students to advance the fields of Kinesiology through evidenced-based patient care and translational research. The program emphasizes basic and clinical interdisciplinary education and research in areas of Kinesiology. The MS in Kinesiology has two concentrations that include a clinical (non-thesis) and research (thesis) degree option.

Applied Physiology Concentration (Thesis required)
The Applied Physiology (AP) concentration is excellent preparation for those planning to continue their education through the PhD, either in Kinesiology or a related field (Biology, Rehabilitation Sciences, Biomechanics, Motor Control, Physiology, etc). Students selecting this concentration will also be well qualified for employment in aspects of the health industry or in research labs.

Clinical Exercise Physiology Concentration (Non-thesis)
The Clinical Exercise Physiology concentration is a CAAHEP-accredited program that is designed to prepare students to become Clinical Exercise Physiologists. Clinical Exercise Physiologists are employed in inpatient and outpatient clinical/rehabilitation settings (e.g. Cardiopulmonary Rehab programs), general wellness/fitness commercial and corporate settings, and industrial settings that provide health care services for both diseased and healthy populations. Through a blend of classroom instruction and clinical experience, the degree program teaches a wide variety of specific health care skills, knowledge, and behaviors within the cardiovascular, pulmonary, metabolic, neoplastic, musculoskeletal, neuromuscular, and immunologic practice areas. The Job Task Analysis for ACSM Certified Clinical Exercise Physiology (ACSM-CEP) is in Appendix A.

Sports Performance Concentration (Non-thesis)
The modern Sports Performance profession relies heavily on evidence-based research in implementing strength and conditioning programs. The curriculum for the proposed Sports Performance concentration consists of high-quality instruction on cutting edge theoretical concepts related to strength and conditioning. The instructors are researchers trained and certified in strength and conditioning from professional organizations including the National Strength and Conditioning Association (NSCA) and have extensive clinical experience. In addition, students will have practical requirements with exposure to cutting edge programming by working directly with UNC Charlotte’s Athletics Department as well as successful community facilities. Since the majority of strength and conditioning positions require a Master's degree with certifications from reputable organizations including NSCA our Sports Performance program will produce highly qualified practitioners in career fields related to athletic performance.
Programmatic Contacts

**Department Chair**  
Dr. JP Barfield  
Professor and Chair  
Belk Gym 235  
abarfie5@uncc.edu

**Graduate Program Director**  
Dr. Joseph Marino  
Associate Professor  
Belk Gym 121  
jmarin10@uncc.edu

**CEP Practicum Coordinator**  
Dr. Trudy Moore-Harrison  
Clinical Assistant Professor  
Belk Gym 217  
704-687-0862  
tlmoore2@uncc.edu

**Strength and Conditioning Practicum Coordinator**  
Dr. Joseph Marino  
Associate Professor  
jmarin10@uncc.edu

**Administrative Support**  
Mrs. Wendy Ramirez  
Administrative Associate to Chair  
Belk Gym 234  
704-687-0874  
wramire1@uncc.edu

**Administrative Support**  
Mrs. Fran Paluso  
Administrative Support Specialist  
Belk Gym 210  
704-687-0873  
fpaluso@uncc.edu

A full list of Kinesiology faculty and staff can be found [here](#).
Getting Started

The following are student services, good information, and/or requirements that students are required to be aware of immediately upon enrollment.

A note on COVID-19

NinerNationCares.uncc.edu, is a care portal to help students find information about financial resources, academic support, food and housing programs, health and wellness initiatives, career service networks, as well as other support services available during the coronavirus COVID-19 pandemic.

I. Health Requirements (Adapted from the Graduate School 2019-2020 Catalog)

Health Insurance Requirements

Health insurance is required of all degree-seeking graduate students with three or more on-campus credit hours; and all international students with an F-1 or J-1 visa, regardless of credit hours. Students who are currently uninsured may enroll in the Student Health Insurance Plan by completing the enrollment form found on the Student Health Center website. Pricing is available on the site as well. Students with existing health insurance coverage must supply this information online to the Student Health Center every Fall and Spring semester by the posted due date. See the Student Health Center website for details. Failure to comply will result in automatic enrollment in the Student Health Insurance Plan for the semester.

Immunization Requirements

To protect all students at UNC Charlotte, North Carolina state law requires proof of immunizations upon entering the University or within thirty calendar days of the start of a student’s first semester. Under North Carolina regulations, students not in compliance will be dropped from all courses. Upon learning of admission to the University, students should submit their immunization records immediately. Immunization Records must be uploaded via the Online Student Health Portal. Further details regarding the immunization requirements and the records submission process are available online from the Student Health Center at studenthealth.uncc.edu. Please consult the website for more detail about the requirements before submitting records to the University. Although a health physical is not required for admission to the University, students are strongly encouraged to contact their healthcare provider or local health department to discuss additional recommendations for vaccinations.

<table>
<thead>
<tr>
<th>Vaccines Required</th>
<th>Tetanus, Diphtheria, Acellular Pertussis (Tdap)</th>
<th>Diphtheria, Tetanus, and/or Pertussis</th>
<th>Polio</th>
<th>Measles</th>
<th>Mumps</th>
<th>Rubella</th>
<th>Hepatitis B</th>
<th>Varicella</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doses Required</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

FOOTNOTE 1: Three doses of tetanus/diphtheria toxoid, of which one must be tetanus/diphtheria/pertussis (Tdap). Students enrolling in a 4-year college or university for the first time on or after July 1, 2008, must receive a tetanus/diphtheria/Pertussis (Tdap) vaccine.

FOOTNOTE 2: An individual attending school who has attained his or her 18th birthday is not required to receive polio vaccine.

FOOTNOTE 3: Measles vaccines are not required if any of the following occur: Diagnoses of disease prior to January 1, 1994; An individual who has been documented by serological testing to have a protective antibody titer against measles and submits the lab report; or An individual born prior to 1957. An individual who enrolled in college or university for the first time before July 1, 1994, is not required to have a second dose of measles vaccine.

FOOTNOTE 4: Mumps vaccine is not required if any of the following occur: An individual who has been documented by serological testing to have a protective antibody titer against mumps and submits the lab report; An individual born prior to 1957; or Enrolled in college or university for the first time before July 1, 1994. An individual entering college or university prior to July 1, 2008, is not required to receive a second dose of mumps vaccine.
Withdrawal for Non-Compliance and Reinstatement

Students who are not in compliance as determined by the Student Health Center (SHC) will be withdrawn from all of their classes by the Office of the Registrar at the end of the thirty (30) day period. Students are therefore strongly encouraged to submit their immunization records prior to the start of the semester. The SHC will also monitor students who are not in compliance but have been approved by the SHC for an extension to receive the necessary immunizations as indicated by a physician’s letter. Once the date for the extension expires, and if the student is still not in compliance, the SHC will notify the Office of the Registrar that the student has failed to comply with Immunization Requirements. The Office of the Registrar will then withdraw the student from their classes. If a student is able to provide evidence to the SHC documenting compliance before the end of the last class day of the semester, he/she will be reinstated into their classes. This reinstatement pertains only to student enrollment status and does not in any way guarantee that the academic, financial, and/or other consequences of noncompliance with Immunization Requirements will be remedied. Such consequences may include, but are not limited to, impact on immigration status, financial aid eligibility, University housing, and 49er ID card accounts. Additionally, reinstated students might not be eligible to make up class work, assignments, tests, or exams as faculty are not obligated to allow make-up work. Furthermore, class work, assignments, tests, or exams missed as a result of being withdrawn for noncompliance with Immunization Requirements will not be a valid basis for a grade appeal. Decisions under this policy cannot be appealed, and students will not be reinstated if they become compliant after the last class day of the semester.

Contact Information:

Questions regarding these mandatory requirements may be directed to the Student Health Center Immunizations Department at 704-687-7424 or immuinfo@uncc.edu.

II. Financial Information (Adapted from the Graduate School 2019-2020 Catalog)

Click on the links below for information on the following:

- [Graduate Tuition and Fees](#)
- [Dining, Housing, and Parking](#)
- [Funding a Graduate Education](#)
- [Payment](#)
- [Refunds](#)
III. Things to Know

Orientation (Adapted from Center for Graduate Life Website)

This Orientation link is a great opportunity to discover your new graduate colleagues and all UNC Charlotte has to offer.

Getting Started Tips

1. Get your NinerNet & Student ID.
   Your NinerNET account is your access to university email, class registration, student account and great benefits on an off campus. Bring a photo ID and student ID number and apply at the ID office in the Student Union.

2. Immunize.
   Visit the Student Health Center and get what you need to meet immunization and health insurance requirements before classes start. While you're there, check out the other services they provide like primary medical care, disease prevention, health education, wellness promotion, and various specialty services, including allergy injections, immunizations, gynecology, physical therapy, and HIV screening.

3. Get registered.
   Registration is easy. Just sign in to your NinerNet account at my.uncc.edu and go to My Student Account. NOTE: Full payment of tuition, fees and changes is due BEFORE the first day of class. If you need to speak to someone, contact Student Accounts.

4. Park it.
   You can buy and display a University parking permit or pay as you go at meters in the visitor decks. Permits do not guarantee a parking space, nor do they reserve a specific parking space, lot or deck.

5. Get around.
   UNC Charlotte offers a FREE campus shuttle service as well as light rail service to and from Uptown Charlotte. Download NextRide (App Store and Google Play), the mobile app with real-time information on Campus Shuttles and SafeRide transports.

6. Degree Works.
   Visit Your Degree Works which has your curriculum. Go to my.uncc.edu

7. Canvas.
   The Learning Management System that UNC Charlotte uses is canvas. The platform used at UNC Charlotte for courses is Canvas. http://canvas.uncc.edu/. On the main page, you can attend workshops or teach yourself Canvas and there is multiple student resources for you to become versed in this platform. You log into your courses using the NinerNET Login.

Here is an orientation module to guide you through getting started with your UNC Charlotte graduate program.

Center for Graduate Life (Adapted from Center for Graduate Life Website)

A part of the Graduate School at UNC Charlotte, the Center for Graduate Life (CGL) is a friendly, welcoming place where graduate students and postdoctoral fellows come to polish professional and personal skills, find a quiet spot for study, connect with others, or just relax. It is located in Cone University Center 268, next to Main Street Market which offers a variety of convenient dining choices.
Graduate Life Ambassadors (GLA) are volunteers who help run Center for Graduate Life (CGL) events, promote events/programs to fellow students, and suggest new initiatives for the CGL.

Graduate Life Fellows (GLF) serve as advocates for the Graduate School to increase awareness of opportunities and resources, and provide support for graduate students from orientation through graduation. Working with the Graduate and Professional Student Government, they coordinate activities that foster diverse social and academic engagement. They strive to build graduate community and enhance student life, with the ultimate goal of elevating graduate education at UNC Charlotte.

Each year the Graduate School’s Center for Graduate Life appoints a group of continuing graduate students to serve as Graduate Life Fellows (GLFs). GLFs are awarded $5,000 for the academic year. Application information can be found in the Spring semester.

**Diversity and Inclusion** (Adapted from Center for Graduate Life Website)

The Graduate School promotes and supports equity and excellence in graduate education. The CGL has compiled resources to engage our graduate student community. See the following links for support of diversity and inclusion:

- [UNC Charlotte's Diversity Webpage](#)
- [College of Liberal Arts & Sciences (CLAS) - A Commitment to Diversity](#)
- [Division of Academic Affairs](#)
- [Division of Student Affairs](#)

**Ombudsman** (Adapted from The Graduate School Website)

The Ombudsman for the Graduate School is a faculty member who helps graduate students and members of the Graduate School community navigate and manage conflict in a constructive way. The Ombuds is an advocate for fairness who listens to graduate students’ concerns and helps students achieve a greater understanding of the problem and possible solutions, and looks for information and resources applicable to the situation. The Ombuds does not advocate for any individual point of view, and does not participate in any formal grievance process, but works to promote a fair process for all.

The Ombudsman can help graduate students in a variety of ways including:

- Listening to graduate student concerns
- Explaining policies and their application to specific cases
- Helping graduate students identify and consider options for resolving conflicts with colleagues and advisors at the University
- Strategizing about a conversation with a student-colleague or supervisor
- Referring graduate students to formal complaint or appeal procedures when warranted
- Referring graduate students to other resources available on campus.
Discussions with the ombudsman are kept confidential, to the extent possible. Appointments can be arranged directly by contacting Dr. Bruce Taylor, 704-687-5347, graduate student Ombudsman.

*Confidentiality cannot be promised in matters relating to concerns of harm or threats to self or others or potential illegal activity.

**University Policies** (Adapted from the Graduate School 2019-2020 Catalog)

As students willingly accept the benefits of membership in the UNC Charlotte community, they also commit to obligations to observe and uphold the principles and standards of conduct that reflect the values of the UNC Charlotte community.

At UNC Charlotte, *University Policy 406, The Code of Student Responsibility*, fulfills the duty of the Chancellor to regulate matters of student conduct in the University community. *University Policy 407, The Code of Student Academic Integrity*, governs student behavior relating to academic work. All UNC Charlotte students are expected to be familiar with both Codes and to conduct themselves in accordance with these requirements. Any person may report an alleged violation(s) of the Code online at [incidentreport.uncc.edu](http://incidentreport.uncc.edu). Individuals may report crimes or incidents involving imminent threat of harm to Police and Public Safety at 704-687-2200.

The University has also established a program for the prevention of the use of illegal drugs and alcohol abuse (University Policy 711), as well as a policy regulating smoking and tobacco product use on campus (University Policy 707). All UNC Charlotte students are obligated to be familiar with and to conduct themselves in accordance with the standards set forth in these policies.

Additionally, the Student Government Association has created a code called *The Noble Niner* that solidifies the high standard of morals, principles, and integrity that all students should strive to uphold the reputation of excellence at UNC Charlotte.

**I. The Code of Student Academic Integrity**

*The Code of Student Academic Integrity* governs the responsibility of students to maintain integrity in academic work, defines violations of the standards, describes procedures for handling alleged violations of the standards, and lists applicable penalties. The following conduct is prohibited in the *Code* as violating those standards:

A. **Cheating.** Intentionally using or attempting to use unauthorized materials, information, notes, study aids or other devices in any academic exercise. This definition includes unauthorized communication of information during an academic exercise.

B. **Fabrication and Falsification.** Intentional and unauthorized alteration or invention of any information or citation in an academic exercise. Falsification is a matter of altering information, while fabrication is a matter of inventing or counterfeiting information for use in any academic exercise.

C. **Multiple Submission.** The submission of substantial portions of the same academic work (including oral reports) for credit more than once without authorization.

D. **Plagiarism.** Intentionally or knowingly presenting the work of another as one’s own (i.e., without proper acknowledgment of the source). The sole exception to the requirement of acknowledging
sources is when the ideas, information, etc., are common knowledge. (NOTE: For more information regarding plagiarism, see PLAGIARISM Appendix at legal.uncc.edu/policies/up-407#appendix)

E. Abuse of Academic Materials. Intentionally or knowingly destroying, stealing, or making inaccessible library or other academic resource material.

F. Complicity in Academic Dishonesty. Intentionally or knowingly helping or attempting to help another to commit an act of academic dishonesty.

G. Group Work. For group work, responsibility for ensuring that academic integrity standards are followed is shared by all members of the group. In cases where an individual student is able to demonstrate that he/she neither knew of nor participated in academic dishonesty, that individual student is not guilty of academic dishonesty.

A full explanation of these definitions, and a description of procedures used in cases where student violations are alleged, is found in the complete text of University Policy 407, The Code of Student Academic Integrity, as it may be modified from time to time. Students are advised to contact the Dean of Students Office or visit legal.uncc.edu/policies/up-407 to ensure they consult the most recent edition.

II. The Code of Student Responsibility

The UNC Charlotte Code of Student Responsibility (the Code) provides that UNC Charlotte strives to assist students in their development by creating a community that values scholarship, integrity, respect, accountability, dignity, honor, compassion, character, and nobility. The mission of the University student conduct process is to support the goals and objectives of the University and the values of the Noble Niner by (a) encouraging appropriate standards of individual and community responsibility; (b) fostering an environment of personal accountability for decisions; (c) promoting personal, social, and ethical development; and (d) striving to protect the well-being, health, safety, and property of all members of the University community. In accordance with The University of North Carolina Board of Governors’ Policy 700.4.2:

1. The University embraces and strives to uphold the freedoms of expression and speech guaranteed by the First Amendment of the U.S. Constitution and the North Carolina Constitution. The University has the right under appropriate circumstances to regulate the time, place, and manner of exercising these and other constitutionally protected rights.

2. All students are responsible for conducting themselves in a manner that helps enhance an environment of learning in which the rights, dignity, worth, and freedom of each member of the academic community are respected.

3. Violations of University policies, rules or regulations, or federal, state, or local law may result in initiation of the Conduct Procedures and a violation(s) of the Code.

4. In determining whether a Student or Student Organization has violated the Code, all relevant facts and circumstances shall be considered. Care must be exercised in order to preserve freedoms of speech and expression, as articulated in current legal standards. Advice should be sought from the Office of Legal Affairs, as appropriate.
Conduct Rules and Regulations (Code Chapter 5). Chapter 5 of the Code includes a list of behaviors that are prohibited by the Code, including but not limited to, acts of harm, relationship violence, harassment, weapons violations, disruption of University activities, drug violations, furnishing false information, theft, vandalism, alcohol violations, sexual misconduct, trespassing, disorderly conduct, hazing, and retaliation. For a full explanation of all conduct prohibited under the Code, consult Chapter 5 of the Code at legal.uncc.edu/policies/up-406#ch5. Chapter 7 of the Code (legal.uncc.edu/policies/up-406#ch7) provides Conduct Procedures applicable for Formal Charge(s) adjudicated by a Hearing Panel or Administrative Hearing Officer under the Code, except that in cases of alleged Sexual and Interpersonal Misconduct, the procedures in Chapter 8 of the Code (legal.uncc.edu/policies/up-406#ch8) also apply.

A full explanation of prohibited conduct, and a description of procedures used in cases where violations are alleged, including appeals processes, are found in the complete text of The Code of Student Responsibility. This Code may be modified from time to time. Students are advised to contact the Dean of Students Office or visit legal.uncc.edu/policies/up-406 to ensure they consult the most recent edition. A full explanation of prohibited conduct, and a description of procedures used in cases where violations are alleged, is found in the complete text of The Code of Student Responsibility. This Code may be modified from time to time. Students are advised to contact the Dean of Students Office or go to legal.uncc.edu/policies/up-406 to ensure they consult the most recent edition.

Degree Requirements

I. Overview

The MS in Kinesiology program adheres to the Master’s Degree Requirements outlined by the Graduate School of UNC Charlotte. The CEP, AP, and SC concentrations within the MS in Kinesiology program require 36 credit hours approved by the Department of Kinesiology and a minimum of 15 credit hours presented for the degree must be in the courses numbered 6000 and above. The CEP and AP share 12 credit hours of core courses. The SC concentration shares 6 hours of core course with the other concentrations. Each concentration has its own requirement of concentration-specific courses and electives. Courses for which undergraduate credit has been awarded may not be repeated for graduate credit.

Early Entry Students

Here is information on the Early Entry Program from The Graduate School. Early-Entry students must submit an Early-Entry Program Form to allow up to 12 graduate credit hours to be counted towards both the MS in Kinesiology and the student’s undergraduate degree. A minimum grade point average of 3.0 is required on all coursework attempted for the degree or they will be dismissed from the program. Similarly, a student who earns two “C” grades will be dismissed from the program. At the time of admission, up to 6 credit hours of graduate transfer credit may be accepted if approved by the Department of Kinesiology and the Graduate School. The early entry students will finish their baccalaureate degree before they complete 15 hours of graduate work (two semesters not including
summer terms). No courses taken before admission to the graduate program may be applied to a graduate degree.

**Course Curriculum**

**Clinical Exercise Physiology Concentration**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>KNES 6115</td>
<td>Research Methods in Kinesiology</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 5232</td>
<td>Physiology of Human Aging</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6280</td>
<td>Advanced Exercise Physiology</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6285</td>
<td>Advanced Cardiopulmonary Physiology</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6120</td>
<td>Advances in Clinical Exercise Physiology</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6121</td>
<td>Clinical Practice in Exercise Physiology</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6134</td>
<td>Exercise Prescription for Cardiopulmonary and Metabolic Disorders</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6151-001</td>
<td>Exercise Testing Methods</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6292</td>
<td>Exercise Prescription for Musculoskeletal Disorders</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6490-001</td>
<td>Adv Practicum in Clinical Exercise Physiology</td>
<td>(1)</td>
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</tbody>
</table>

Electives (6)

**Applied Physiology Concentration**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>KNES 6115</td>
<td>Research Methods in Kinesiology</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 5232</td>
<td>Physiology of Human Aging</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6280</td>
<td>Advanced Exercise Physiology</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6285</td>
<td>Advanced Cardiopulmonary Physiology</td>
<td>(3)</td>
</tr>
<tr>
<td>STAT 6127</td>
<td>Biostatistics</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6171</td>
<td>Advanced Biomechanics</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6800</td>
<td>Directed Independent Study</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6900</td>
<td>Research &amp; Thesis in Kinesiology</td>
<td>(6)</td>
</tr>
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</table>

Electives (9)

**Sports Performance Concentration (21-23 Cohort)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>KNES 5115</td>
<td>Research Methods in Kinesiology</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 5232</td>
<td>Physiology of Human Aging</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6280</td>
<td>Advanced Exercise Physiology</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6285</td>
<td>Advanced Cardiopulmonary Physiology</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6320</td>
<td>Adv Strength and Conditioning</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6340</td>
<td>Periodization</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6280</td>
<td>Advanced Ex Phys</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6260</td>
<td>Nutrition</td>
<td>(3)</td>
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<tr>
<td>STAT 6127</td>
<td>Biostatistics</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6171</td>
<td>Advanced Biomechanics</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6151-002</td>
<td>Ex Testing Measurement</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6282</td>
<td>Skeletal Muscle in Health and Disease</td>
<td>(3)</td>
</tr>
<tr>
<td>KNES 6490-002</td>
<td>Practicum (1) (200h- taken 2 times)</td>
<td>(1)</td>
</tr>
<tr>
<td>KNES 6099</td>
<td>Special Topics: Sport Psychology</td>
<td>(3)</td>
</tr>
</tbody>
</table>
Strength and Conditioning (22-24 Cohort)

KNES 5115  Research Methods in Kinesiology (3)
KNES 6320  Advanced Strength and Conditioning (3)
KNES 5100  Organization and Administration of Strength and Conditioning (3)
KNES 6280  Advanced Exercise Physiology (3)
KNES 6151-002  Exercise Testing Methods for Strength and Conditioning (3)
KNES 5333  Sports Psychology (3)
KNES 6171  Advanced Biomechanics (3)
KNES 6340  Periodization (3)
KNES 6099  Special Topics: Sports Nutrition (3)
KNES 6282  Skeletal Muscle in Health and Disease (3)
KNES 6490-002  Practicum (1) (200h- taken 3 times)
Elective  Elective (3)

Each Practicum credit is equivalent to 200 clinical or field experience hours. Clinical practicum courses usually begin in the third semester of the student’s program and are arranged through the Clinical Practicum Coordinator within the Department of Applied Physiology, Health, and Clinical Sciences (APHCS). Strength and Conditioning practicum courses usually begin in the second semester of the student’s program and are arranged through the Strength and Conditioning Practicum Coordinator within the Department APHCS. For further information regarding the Advanced Practicum courses and their requirements, please see Appendix B: Practicum Handbook for either CEP or SC.

Graduate courses can be counted toward the MS degree as long as two conditions are met: 1) the student’s advisor approves the course prior to course registration and 2) the course allows for at least 15 hours of course credit to be at the 6000 level as outlined in above.

II. Progression of Classes

Sequence for Applied Physiology Concentration

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1st Year</strong></td>
<td></td>
</tr>
<tr>
<td>KNES 5232 - Phys. of Aging (3)</td>
<td>KNES 6800 - Independent Study (3)</td>
</tr>
<tr>
<td>KNES 6115 - Res Methods (3)</td>
<td>KNES 6280 - Adv. Ex Physiol (3)</td>
</tr>
<tr>
<td>Elective - advisor approval required (3)</td>
<td>Elective (3)</td>
</tr>
<tr>
<td><strong>2nd Year</strong></td>
<td></td>
</tr>
<tr>
<td>STAT 6127 - Intro to Biostatistics (3)</td>
<td>KNES 6285 - Adv. Cardiopulm Physiol (3)</td>
</tr>
<tr>
<td>OR</td>
<td>KNES 6900 - Thesis (3)</td>
</tr>
<tr>
<td>RSCH 6110- Descriptive and Inferential</td>
<td>Elective - advisor approval required (3)</td>
</tr>
<tr>
<td>Statistics</td>
<td></td>
</tr>
<tr>
<td>KNES 6171 Adv. Biomechanics (3)</td>
<td></td>
</tr>
<tr>
<td>KNES 6900 - Thesis (3)</td>
<td></td>
</tr>
</tbody>
</table>

13
### Sequence for Early Entry Applied Physiology Concentration

<table>
<thead>
<tr>
<th>1st Year</th>
<th>Fall</th>
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<tbody>
<tr>
<td></td>
<td>KNES 5232 - Phys. of Aging (3)</td>
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<td>KNES 6115 - Res Methods (3)</td>
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### Sequence for Clinical Exercise Physiology Concentration

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<tr>
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<td>KNES 6120 – Advs. in CEP (3)</td>
<td>KNES 6134 – Ex Rx Card Met D (3)</td>
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<td>KNES 6490 – Adv. Practicum 1 (1)</td>
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<td>Elective 1 (3)</td>
<td>KNES 6151 – Ex Test Methods (3)</td>
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</tr>
<tr>
<td>2nd Year</td>
<td>KNES 6121 –Clin Pract Ex Ph (3)</td>
<td>KNES 6285 – Adv. Card Physiol (3)</td>
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</tr>
<tr>
<td></td>
<td>KNES 5232 – Phys. of Aging (3)</td>
<td>KNES 6490 – Adv. Practicum (1)</td>
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<td>Elective 2 OR</td>
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### Sequence for Early Entry Clinical Exercise Physiology Concentration

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<tr>
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<td>KNES 6121 – Clin Prac Ex Ph (3)</td>
<td>KNES 6285 – Adv. Card Physiol (3)</td>
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<td>Elective 2 OR</td>
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<tr>
<td></td>
<td>KNES 6490 – Adv. Practicum 2 (1)</td>
<td>KNES 6900–Thesis (3)*</td>
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### Sequence for Sports Performance Concentration for Class of 2023

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<tbody>
<tr>
<td><strong>1st Year</strong></td>
<td>KNES 6115 - Res Methods</td>
<td>KNES 6280 - Adv. Ex Physiol</td>
</tr>
<tr>
<td></td>
<td>KNES 6320 – Adv Strength &amp; Con</td>
<td>KNES 6260 Nutrition</td>
</tr>
<tr>
<td></td>
<td>KNES 6171 Adv Biomechanics or STAT</td>
<td>KNES 6099- Special Topics – Sport Psychology</td>
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<tr>
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<td>6127 Biostatistics</td>
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<tr>
<td><strong>2nd Year</strong></td>
<td>KNES 6340 Periodization</td>
<td>KNES 6285 - Adv. Cardiopulm Physiol</td>
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<td>KNES 6490-002 Practicum 1 (200h)</td>
<td>KNES 6490-002 Practicum 2 (200h + capstone</td>
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<td>KNES 6171 Adv Biomechanics or STAT</td>
<td>KNES 6282 Skeletal Muscle in Health and Disease</td>
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### Sequence for Early Entry Sports Performance

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<td>KNES 6340 Periodization</td>
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<td>KNES 6171 Adv Biomechanics</td>
<td>KNES 6490-002 Practicum 2 (200h + capstone</td>
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<td>KNES 6282 Skeletal Muscle in Health and Disease</td>
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<td>STAT 6127 - Intro to Biostatistics OR RSCH 6110- Descriptive and Inferential Statistics</td>
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Sequence for Sports Performance Concentration for Class of 2024

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<td>KNES 5115 - Res Methods</td>
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<td>KNES 5100 - Organization and Administration</td>
<td>KNES 5333 - Sports Psychology</td>
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<td>KNES 6490 - Practicum 1</td>
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<td>2nd Year</td>
<td>KNES 6171 - Adv. Biomechanics</td>
<td>KNES 6099 - Sports Nutrition</td>
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<td>KNES 6340 - Periodization</td>
<td>KNES 6282 Skeletal Muscle in Health and Disease</td>
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<tr>
<td></td>
<td>KNES 6490 - Practicum 2</td>
<td>KNES 6490 - Practicum 3</td>
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Sequence for Early Entry Sports Performance

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<td>KNES 6490 - Practicum 3</td>
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<td>Elective</td>
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III. Comprehensive Examination

All candidates for the degree must pass a comprehensive examination as outlined by the Graduate School at UNC Charlotte.

CEP concentration

A student selecting the Clinical Exercise Physiology concentration will have two attempts to pass the comprehensive examination. The student will have one attempt to pass the Clinical Exercise Physiologist examination (CEP), administered by the American College of Sports Medicine. The opportunity to take that exam will be scheduled. The application is submitted during the student’s last semester before graduation. Upon approval (usually takes 3-4 weeks), the student will receive a voucher number and can register to take the exam. The exam costs ~ $279 for ACSM members and ~ $349 for non-members. Retests cost ~ $175. There will be a designated week for everyone to take the CEP which is typically the week after Spring Break. Information for the ACSM-CEP.

If the student does not pass the CEP then their second attempt will be the scheduled faculty-driven comprehensive examination. This examination is offered one time during the fall (1st week in Dec) and spring semester (3rd or 4th week in April) and is not offered during the summer. If the CEP-tack student is
also doing work for a thesis, then the student may present credit for at least 3 credit hours of KNES 6900 and pass a thesis defense.

**Failing the comprehensive competency exam, the student will be dismissed from the MS in Kinesiology program.** Upon passing the exam, the student must complete the Report of Comprehensive Exam form.

**SC Concentration**

The student has 2 attempts to take a scheduled faculty-driven comprehensive examination.

**Failing the comprehensive competency exam, the student will be dismissed from the MS in Kinesiology program.** Upon passing the exam, the student must complete the Report of Comprehensive Exam form.

**AP Concentration**

A student selecting the Applied Physiology concentration must present credit for at least 6 credit hours of KNES 6900 and pass a thesis defense.

Work on the Research Thesis begins in the student’s first semester and will culminate in a thesis defense during their final semester of enrollment. Throughout this process, there are a number of soft and hard deadlines to consider as well as a number of forms that must be completed. **Students who fail to make satisfactory progress on their thesis may be dropped by their advisor. If a student is dropped, they will have 1 academic month to find a new advisor. If a new advisor cannot be found, the student will be removed from the program at the end of the current term.**

Required paperwork for the thesis is:

1) IRB/IACUC approval must be obtained prior to proposal
2) Obtain pilot data and write First 3 Chapters of the thesis (Introduction, Literature Review and Materials and Methods).
3) Defend your proposal
   - Upon a successful proposal- you need to have your committee sign and then turn in the Proposal Defense Report, & Appointment of Master’s Thesis Committee Form to the Grad school (201 Cato Hall). Don’t forget you need Graduate Program Director’s signature. Programs and students may elect to appoint co-chairs for the committee provided both faculty chairs hold a graduate faculty appointment. One chair must hold regular graduate faculty membership. Co-chairs should be listed on the committee form, in the program, and on the title page.
   - If a committee member is participating from a remote location, bring the Remote Participation Form.
4) Collect data
5) Defend your thesis (final semester) and submit ETDs
   - Must be registered the semester you are graduating.
     - Can register for GRAD 7999 (residency) if you have completed your coursework and will be defending your thesis by 4th week of the semester that you are graduating.
   - Use the formatting guidelines of the Grad School. Go to this website to see their guidelines.
   - Bring to you defense, the Defense Report form and the ETD signature page for your committee to sign & deliver to Graduate School Reception Desk in Cato Hall 201. The ETD form should be submitted to the Graduate School when you submit your thesis to ProQuest. Payment for the
Submission Fee and optional Copyright and Open Access Publishing must be made through the online Payment Portal. Don't forget you need Graduate Program Director’s signature and report must be submitted with 24h of defense. Here is the ETD preparation instructions.

- It will be an electronic submission of your thesis. Go to this website to see how. You will also need to submit binding instructions
- There is a ~ $30 formatting fee payable by check or money order to UNC Charlotte

IV. Concentration Changes

The thesis and non-thesis approaches are designed to meet the needs of students preparing for different types of careers and represent qualitatively different educational experiences. Consequently, the Department of Kinesiology and the Dean of the Graduate School strongly discourage any switching from one concentration to another. Such a switch almost always delays graduation. If a switch from the AP, CEP, or SC concentration is approved, the grade of I for any thesis work completed will be changed to W on the transcript with no refund of tuition for the course(s) as outlined under the Thesis section of the UNC Charlotte Graduate Catalog. The deadline for concentration changes is April of the student’s first year.

V. Graduation (Adapted from The Graduate School Website)

1) Check your audit on your Degree Works as it is the definitive record for graduation clearance. Students, faculty, and staff may access DegreeWorks via http://my.uncc.edu.
2) Meet with your advisor. It is your responsibility to ensure that he/she is making satisfactory progress towards graduation, based on the program requirements outlined in DegreeWorks and any additional directions issued by the graduate program.
3) Enroll. Per academic policy, all students must be enrolled in the term of graduation, even if all degree/certificate requirements have been met.
4) Apply for Graduation You must apply for graduation by the published deadline in the final term. Students who fail to apply for graduation by the published deadline will not be evaluated for graduation and will be ineligible to participate in the commencement ceremony.

Follow these steps to apply for graduation:

1. Log into my.uncc.edu using your NinerNET username and password.
2. Click the Banner Self Service link.
3. In the Student Services/Student Accounts tab, select the Student Records option.
4. Click on Online Graduation Application.

5) Graduate School point of contacts for graduation clearance> For master’s thesis student inquiries regarding graduation clearance, please contact Julie Green. For all general questions regarding graduation clearance, please contact gradgraduation@uncc.edu.

6) Exit Survey and Interview. An electronic survey will be distributed during the 2nd spring term and must be completed prior to the last day of class to receive final approval for graduation. All answers are
anonymous and we want brutal honesty about the courses, program, etc. You also must schedule an exit interview with the Graduate Program Director.

7) Participation in Commencement.

General information about graduation and the associated fees can be found here.

Commencement at UNC Charlotte is held just twice annually, once in May and once in December. Students who graduate in either summer term participate in the December commencement ceremony. In order to participate or "walk" in the commencement or hooding ceremony, a student must have successfully completed all degree requirements and have submitted all required forms by the published deadlines, including the Online Graduation Application (please refer to the Academic Calendar for these deadlines). All students will be asked to provide a phonetic spelling of their name for their commencement ceremony. Please note that Master's diplomas and graduate certificates are not distributed at commencement; students should expect to receive the diploma or certificate 6-8 weeks after commencement. Be sure to update your email and mailing address through my.uncc.edu in order to receive important information updates as well as the diploma/certificate.

- Detailed instructions on the line-up, procession, and ceremony can be found on the University’s Commencement website.
- Graduate caps and gowns are available at the Campus Bookstore several months prior to commencement. UNC Charlotte also offers custom doctoral regalia.

ADDITIONAL ACADEMIC POLICIES

I. Advising Information

Upon acceptance into the program, each student is assigned an advisor. For all students in the MS in Kinesiology program, the Graduate Program Coordinator is an advisor. For those in the CEP concentration, the Graduate Program Coordinator is your primary advisor. For those in the AP concentration, the Graduate Program Coordinator is considered your co-advisor with your thesis advisor. Any course substitution and all electives must be approved by the academic advisor.

II. Continuous Registration

Students in graduate degree programs are required to maintain continuous registration (fall and spring semesters) for thesis, dissertation, project, or directed study until work is completed. If you have completed all of the course requirements and Practicums, you may register for the KNES 7999 (Graduate Residency). Complete the Graduate Academic Petition to register for the course.

Information on The Graduate Academic Petition can be found here. Besides for Continuous Registration, there are multiple types of petition requests: course overload, course substitution, late add, late withdrawal, leave of absence, transfer of credit, other course-related and other non-course related.

III. Grading Policies
The MS in Kinesiology program follows all grading policies set forth by UNC Charlotte. Please reference the Graduate Catalog for specific information related to any grading policy questions. Grading and Related Policies. The grade of I is assigned at the discretion of the instructor when a student who is otherwise passing has not, due to circumstances beyond his/her control, completed all the work in the course. The missing work must be completed within 12 months (exact date determined by instructor) or the I will be changed to a U.

IV. Academic Standing

The MS in Kinesiology program follows all academic standing, suspension, and appeal policies set forth by UNC Charlotte with one exception. Students who receive 2 C’s will be suspended from the program and will need to perform the appeal procedure. University policy requires that no course listed on a master’s student’s candidacy form be older than six years at the time of graduation. Courses that exceed this time limit must be revalidated or retaken. Complete a graduate petition form to request a course revalidation.

V. Withdrawals (From The Graduate School Website)

WITHDRAWING FROM A CLASS OR FROM THE UNIVERSITY:
Once a student has registered for classes and it becomes necessary to terminate the registration, there are two possible courses of action: (1) withdrawal from classes and/or from the University, or (2) Cancellation of Enrollment. Discussed here is the process for withdrawing from a class or program.

Students are expected to complete all courses for which they are registered at the close of the Add/Drop Period. These courses will appear on the transcript, count as attempted hours, and except for withdrawals allowed under this policy, receive grades used in the GPA calculation. All types of termination, including withdrawal, withdrawal for extenuating circumstances, and Cancellation of Enrollment are subject to all financial aid and satisfactory academic progress rules.

WITHDRAWALS - IN TERM
Students may withdraw themselves from a course or courses and receive a grade of W, subject to the following conditions:

DEADLINE
The deadline to withdraw from one or more courses (including withdrawal from all courses) is at the 60% completion point of the term. The precise date for each term will be published in the Academic Calendar. After this deadline, a late withdrawal will only be allowed for approved extenuating circumstances.

GRADE OF W
A grade of W will be recorded for each withdrawal without extenuating circumstances. Courses marked W do not count in GPA calculations, but do count in attempted hour calculations for all undergraduate and graduate students.
WITHDRAWAL FOR EXTENUATING CIRCUMSTANCES

Students who experience serious, documented extenuating circumstances (personal or medical crisis or military deployment) may request a withdrawal for extenuating circumstances. The Dean of Students Office is responsible for developing and communicating standards and procedures in conjunction with the Colleges that govern these decisions (see UNC Charlotte Academic Procedure: Cancellation of Enrollment and Effects of Withdrawal from Courses). The student must submit the request during the term the crisis begins. If approved, a grade of WE will be recorded for each course. Courses marked WE do not count in GPA calculations, but do count in attempted hour calculations. If not approved, the student may appeal to the appropriate office (see UNC Charlotte Academic Procedure: Cancellation of Enrollment and Effects of Withdrawal from Courses).

VI. Suspension and Termination Appeals (from The Graduate School Website)

ACADEMIC SUSPENSION

All graduate students (degree seeking and post baccalaureate) are subject to academic suspension. An accumulation of three marginal C grades in any graduate course work will result in suspension of the student’s enrollment. If a student makes a grade of U or N in any graduate course, enrollment will be suspended. A graduate student whose enrollment has been suspended because of grades is ineligible to register in any semester or summer session unless properly reinstated. Note: Some Departments and/or programs have stricter regulations on suspension than those of the Graduate School. See the academic regulations presented in the program specific sections of the Graduate Catalog.

APPEAL PROCEDURE

Graduate students may appeal a suspension or termination using the procedures described in the following paragraphs. Other grievances relating to academic status are to be addressed to the Graduate School.

APPEAL OF ACADEMIC SUSPENSION FOR THE PURPOSE OF REINSTATEMENT

A student who has been suspended from the Graduate School and/or a program of study may appeal his/her suspension and must be reinstated in order to continue his/her studies. After notification of suspension is received, the student initiates the appeal procedure by submitting a “Suspension Appeal Form” to the graduate coordinator/director of his/her academic program explaining any extenuating circumstances. The "Suspension Appeal Form" is available on the "Forms" page of the Graduate School website. The graduate coordinator/director will forward this form to the Graduate School with a recommendation regarding reinstatement. Non-degree seeking students submit the “Suspension Appeal Form” directly to the Graduate School or, in the case of licensure students in the College of Education, to the Associate Dean of the College of Education. The Dean of the Graduate School makes the decision on the suspension appeal and notifies the student of the decision in writing.

A student readmitted to a graduate program through reinstatement will be expected to complete the degree program with satisfactory or commendable performance (“A” or “B” grades). Should a student receive a grade of C, U or N in a graduate course after being reinstated to the program, enrollment in the graduate program will be terminated.

TERMINATION APPEAL PROCEDURES FOR DEGREE SEEKING STUDENTS
The procedure for appealing a termination is different than that for a suspension. If a student is terminated, he or she has the option of filing an appeal. Please see the catalog for the description of the termination process identified in the section entitled “Appeal of Academic Termination for the Purpose of Reinstatement.”

Graduate students may have grounds to appeal their termination from the Graduate School. There are several different types of termination appeals available to a student:

**ACADEMIC TERMINATION OF NON-DEGREE SEEKING (POST BACCALAUREATE) STUDENTS**

Academic termination of a post baccalaureate student's program of studies may occur in two ways.

1. A student’s graduate status will be terminated if, after receiving an initial suspension and subsequent reinstatement the student receives a grade of C, U or N in a graduate level course; or
2. A student is denied readmission through the suspension appeal process.

**ACADEMIC TERMINATION OF DEGREE SEEKING STUDENTS**

Academic termination of a graduate student’s program of studies may occur in four ways.

1. Students may be required to terminate their graduate studies if they fail to maintain satisfactory academic progress. One example of failure to maintain satisfactory academic progress is non-adherence to the schedule of “Time Limits for Degrees.” See the Graduate Catalog for details.
2. A student’s graduate studies may be terminated if he/she fails to maintain the specific standards of the student’s academic program as described in the program specific sections of the Graduate Catalog. For example, a doctoral program may indicate that the accumulation of two C grades or one U grade is grounds for termination from the program.
3. A student’s graduate studies will be terminated if, after receiving an initial suspension and subsequent reinstatement the student receives a grade of C, U or N in a graduate level course.
4. Students who are suspended from a graduate program and are denied re-admittance through the suspension appeal process are considered terminated from their graduate program. In all cases of termination from a graduate program, the student's transcript will bear the notation “Candidacy Terminated.”

**APPEAL OF ACADEMIC TERMINATION FOR THE PURPOSE OF REINSTATEMENT (DEGREE SEEKING STUDENTS)**

While an action of termination is considered final, a student who is terminated from a graduate program may appeal that termination to the Graduate School if there are unusual or extenuating circumstances. The type of academic termination will determine the permissible grounds for the petition and the specific procedure utilized to initiate the appeal. Please note, the Appeals Committee is not obligated to hear appeals for reinstatement to the current semester.

**Category 1: Academic Termination Based on Failure to Maintain Commendable or Satisfactory Performance in Course Work**
Category 1 appeals are available to students who have been terminated for receiving a U, N or C grade after an initial suspension and students who fail to maintain the specific grading standards of an academic program. In these cases, an Appeal of Academic Termination submitted to the Graduate School must be supported by the student’s graduate program. Without support from the student’s graduate program, academic termination of this type is always considered a final action.

To initiate a Category 1 Appeal of Academic Termination, the student must send a written letter to the Graduate School requesting consideration of his/her case by the UNC Charlotte Graduate School Appeals Committee. In the written request, the student must make his/her case for reinstatement. Included with the student’s letter must be at least two letters of support from the academic department.

1. For master’s degree students, the termination appeal should include a letter from the program coordinator/director and a letter from the department chair, major advisor and/or the thesis/project advisor.
2. For a doctoral student, a termination appeal should include a letter from the program coordinator/director and the advisory committee or dissertation committee chair.

All documents must be received by the Graduate School within 30 days of the date on the letter of termination. Once the Graduate School receives a Category 1 Appeal of Termination, it will be forwarded to the Chair of the Graduate School Appeals Committee. This Committee will review all relevant materials and make a recommendation to the Dean of the Graduate School. The Dean of the Graduate School makes the decision on the Appeal of Termination case and his/her decision is final. This process may take several weeks, depending on when materials are submitted.

Category 2: Academic Termination Based on Programmatic Action

Category 2 appeals are for students who have been terminated for failure to maintain satisfactory progress in an academic program and for students who have been denied re-admittance through the suspension appeal process. Academic decisions based on the disciplinary expertise and judgment of graduate faculty members and program coordinators/directors in a particular field are not subject to appeal. The fact that a programmatic decision goes against a student’s desire for continuation in an academic degree program is not grounds for a termination appeal. However, a Category 2 appeal may be brought on the grounds that there was “procedural error” or “discrimination” in the termination decision. To initiate a Category 2 Appeal of Academic Termination, the student must send a written letter to the Graduate School requesting consideration of his/her case by the UNC Charlotte Graduate School Appeals Committee. In the written request, the student must make his/her case for reinstatement. If the student is alleging “procedural error,” the student must specify what procedures were utilized and how the program deviated from the specified procedures. If the basis of the appeal is “discrimination,” the student must show how his/her case was handled substantially different from those of other students in similar circumstances. A termination appeal request and the supporting documentation must be received by the Graduate School within 30 days of the date on the letter of termination. Once the Graduate School receives a Category 2 Appeal of Termination, it will be forwarded to the Chair of the Graduate School Appeals Committee. The Chair of the Appeals Committee will contact the program in question and request a response to allegations of “procedural error” and/or “discrimination.” The program will have two weeks to respond to the request of the Appeals Committee Chair. Once all relevant information had been received, the Committee will review the materials and make a recommendation to the Dean of the Graduate School. The Dean of the Graduate School makes the decision on the Appeal of Termination case and his/her decision is final. The process will take a minimum of two weeks and up to 30 days.
READEMISSION OF A TERMINATED GRADUATE STUDENT

Students who have been academically terminated from the Graduate School and/or a UNC Charlotte graduate program are not eligible for readmission as either a degree seeking or non-degree seeking graduate student. However, if after two years the student can demonstrate the potential for academic success and/or personal and professional development since leaving the University, the student may initiate a request for readmission to the Graduate School. (See the Graduate Catalog for instructions.)

ASSISTANTSHIPS

I. Clauses in all GA Contracts

● Because of the nature of this appointment Graduate Assistants are not eligible for benefits offered by the State to employees and Student's employment is not subject to the North Carolina State Personnel Act.

● All Graduate Assistants are limited to employment not to exceed a total of twenty hours per week for all jobs, on or off campus, with the exception of summer hours which must be pre-approved by the Graduate School. Failure to abide by this restriction may result in the termination of this appointment.

● If for any reason Student is unable to, or otherwise does not, complete the term of appointment, compensation will be prorated on the basis of duties actually performed and the time worked.

● Student must enroll for a minimum of six graduate credit hours (or nine if receiving GASP) during each academic semester that this appointment is in effect and continuation of this appointment is contingent upon satisfactory performance in all courses and maintenance of a 3.0 Graduate GPA. Continuing students are eligible to hold summer appointments provided that the student is registered for the fall semester or concurrent summer session.

● Student also agrees to perform the duties and responsibilities set forth in Attachment A to this Agreement, which is attached hereto and incorporated herein as if fully set forth.

● Student agrees to carry out all duties and responsibilities in compliance with all federal and state laws and regulations and with the provisions of the University's Policy Statements. Said policy statements include, but are not limited to, Policy Statement # 105 Code of Student Academic Integrity and Policy Statement # 104 Code of Student Responsibility. A violation of any law, regulation, or policy statement may result in termination of this Agreement.

● Any academic dishonesty by students in any class for which Student is responsible must be handled in accordance with the provisions of the Code of Student Academic Integrity.

● Student is required to participate in the Graduate School’s Graduate Teaching Assistant Orientation program. International Teaching Assistants are also required to attend the ITA Orientation and Language Assessment program. Failure to attend the Graduate Teaching Assistant Orientation program may lead to termination of this Agreement.

The complete set of University policies regarding Graduate Assistantship appointments can be found at the Office of the Provost.

II. Graduate Assistant Dress Code Policy

For the purposes of this policy, a Graduate Assistant is defined as any student enrolled in the MS in Kinesiology program that holds the following positions:

1. A Graduate Assistantship (GA) position through an agency outside of UNC Charlotte.
2. A Graduate Assistantship (GA) through a unit (academic or otherwise) within UNC Charlotte but outside of the Department of Kinesiology.
3. A Research Assistantship (RA) through a Research Laboratory either within or external to UNC Charlotte (e.g. RA position within the Laboratory of Systems Physiology).
4. A Teaching Assistantship (TA) through an academic program outside of the Department of Kinesiology (e.g. LBST TA position).

It is our policy that such students dress as required by their employer. The requirements of the employer should be sought out prior to the initiation or employment and should be maintained at all times. When in doubt, the dress for any and all students on a GA, RA, or TA should be professional, promote UNC Charlotte and/or the respective agency, lab, or program they are employed by and be appropriate for work being conducted.

**KNES Teaching Assistant Dress Code Policy**

For the purposes of this policy, a Teaching Assistant (TA) is defined as any individual who assists with the delivery of an academic course (i.e. interacting with enrolled students) under any of the following conditions: 1) as a volunteer, 2) as a student enrolled in an independent study style course, or 3) as a paid employee of the department of Kinesiology.

Given the breadth of academic courses offered by the department of Kinesiology, several dress codes have been developed and will be explained in greater detail below. In general, the dress for any and all TAs should be professional, promote UNC Charlotte whenever possible, and be appropriate for the instructional setting.

**Dress Code for TAs of activity based courses.**

1. TAs should be wearing name tags during class (unless participating in vigorous activity).
2. If participating in the activities of the day, then clean and appropriate workout clothes should be worn. Preference should be given to UNC Charlotte attire with secondary preference given to neutral attire that does not promote non-UNC Charlotte academic institutions.
3. If not participating in the activities of the day, then clean and appropriate casual to professional dress clothes should be worn. This includes polo and t-shirts for tops and nice jeans (no holes), slacks, dresses, skirts, or khaki style shorts for bottoms. Preference should be given the UNC Charlotte attire with secondary preference given to neutral attire.
4. Clean and appropriate jackets, sweatshirts, sweaters, etc. are allowed during colder weather but should adhere to the same guidelines listed above for shirts when both participating and not participating in activities.
5. The following items are not allowed: sandals/flip-flops, hats (when indoors), tops without sleeves when worn as outerwear (e.g. sleeveless shirts, tank tops, sports bras), any article of clothing with tears and/or holes, any articles of clothing that may be considered revealing at any time during the required duties of a TA (e.g. low cut tops, overly short shorts, etc), any articles of clothing displaying language or symbols that could be considered offensive, and articles of clothing promoting non-UNC Charlotte academic institutions.
6. Final discretion of attire appropriateness lies with the Lifetime Activity Course Supervisor or the MS Kinesiology program director.

**Dress Code for TAs of didactic and/or psychomotor based labs and courses.**

1. TAs should be wearing name tags during class (unless participating in vigorous activity).
2. There are two options: 1) Business-casual attire (no miniskirts or halter tops or nightclub attire) or 2) solid color pants (black, tan or navy blue) with polo shirt (UNCC logo-preferred). Business casual or sneakers are preferred footwear. No jeans or flip flops.

3. On non-teaching days, please defer to then clean and appropriate casual to professional dress clothes should be worn. This includes polo and t-shirts for tops and nice jeans (no holes; and must be worn above your hips), slacks, dresses, skirts, or khaki style shorts for bottoms. Preference should be given the UNC Charlotte attire with secondary preference given to neutral attire.

4. The following items are not allowed: any articles of clothing that may be considered revealing at any time during the required duties of a TA (e.g. low cut tops, overly short shorts, etc), articles of clothing promoting non-UNC Charlotte academic institutions, and any articles of clothing displaying language or symbols that could be considered offensive.

5. Clean and appropriate jackets, sweatshirts, sweaters, etc. are allowed during colder weather but should adhere to the same guidelines listed above for shirts.

6. If questions arise regarding the appropriateness of attire, please seek the guidance of the faculty member that you are assisting or the MS Kinesiology program director. Final discretion of attire appropriateness lies with the faculty member you are assisting.

Consequences for not adhering to the dress code

1) First offense: verbal warning from the supervisor of MS Kinesiology director.
2) Second offence: a written warning from the supervisor and MS Kinesiology director.
3) Third offense: Loss of assistantship.

III. TIME SHEETS
You will be filling out a weekly time sheet. On the sheet you will place the day, time, activity and duration of that activity. The time sheet is to be sent every 2 weeks to your supervisor and The Graduate Program Director.

IV. Attitude
This program requires a substantial commitment on the part of the faculty, staff and students. If you have an attitude of being willing to learn and enjoying the fields of Kinesiology you will be successful here. Be active and take advantage of the many opportunities offered. View your responsibilities as an opportunity to learn and advance your own personal skill sets rather than just more work. Practice developing a positive attitude; this will rub off on others and help in dealing with clients/research subjects, students, and your peers. Develop a professional, yet friendly and positive manner when working and dealing with others. This program is your chance to work on this important aspect of being professional.

V. Punctuality
Be on time for all meetings and events (Being on time means arriving 10-15 minutes early for any appointment). When you have a job, show up early and make sure everything is ready prior to actual performance.
VI. External jobs/work
An assistantship involves 20 hours/week of scheduled work plus active participation in other weekly activities. Another 20+ hours/week will be spent attending classes, studying/writing for classes, learning new techniques, and assisting with other activities. This is easily a 40+ hour work week; any additional outside work can have a negative effect on your academic success and/or success in your assistantship duties. While we will not stop students from obtaining outside employment, it is very important for students to understand the important of not spreading themselves too thin.

VII. Academic Expectations
To qualify for full assistantship money and be considered a full time student, you must be enrolled in nine graduate credit hours each Fall and Spring semester. During summer sessions a stipend can be given when no classes are being taken. However, you are often required to be registered for 9 graduate credit hours for the following Fall semester to earn your paycheck.
It will be your responsibility to balance your assistantship commitments and your coursework, research thesis, and/or preparation for your comprehensive examination. You will not be excused from your assistantship duties because of an upcoming classroom assignment or issues relating to your thesis or comprehensive examination (RCEP exam). Each semester it is expected that you communicate with the Program Coordinator about your upcoming class schedule and progress towards graduation.

VIII. Notice of Assistantship Status
Any and all assistantships can be revoked at any time if procedures in this manual or faculty recommendations/requests are not adhered to. Assistantship contracts and letters will be signed at the beginning of each academic year and at the beginning of the summer. An assistantship will generally be provided for two full academic years (year 1 - Fall, Spring; year 2 - Fall, Spring) but depends on the exact contract.
APPENDIX A. ACSM CERTIFIED CLINICAL EXERCISE PHYSIOLOGIST JOB TASK ANALYSIS OUTLINE

The job task analysis (JTA) is intended to serve as a blueprint of the job of an ACSM Certified Clinical Exercise Physiologist® (ACSM-CEP®). The examination intended to assess the practice-related knowledge of professionals seeking certification as an ACSM-CEP® is based on the content of this document. When preparing for the examination, it is important to remember that all examination questions are based on this outline.

Job Definition
The ACSM Certified Clinical Exercise Physiologist® (ACSM-CEP®) is an allied health professional with a minimum of a bachelor’s degree in exercise science or equivalent and 1,200 hours of clinical hands-on experience or a master’s degree in clinical exercise physiology and 600 hours of hands-on clinical experience. ACSM-CEPs® utilize prescribed exercise, basic health behavior interventions and promote physical activity for individuals with chronic diseases or conditions; examples include, but are not limited to, individuals with cardiovascular, pulmonary, metabolic, orthopedic, musculoskeletal, neuromuscular, neoplastic, immunologic and hematologic diseases. The ACSM-CEP® provides primary and secondary prevention strategies designed to improve, maintain or attenuate declines in fitness and health in populations ranging from children to older adults. The ACSM-CEP® provides exercise screening, exercise and fitness testing, exercise prescriptions, exercise and physical activity counseling, exercise supervision, exercise and health education/promotion, and measurement and evaluation of exercise and physical activity-related outcome measures. The ACSM-CEP® works individually or as part of an interdisciplinary team in a clinical, community or public health setting. ACSM-CEPs® may receive referrals from a referring practitioner to implement exercise protocols. The practice and supervision of the ACSM-CEP® is guided by published professional guidelines and standards and applicable state and federal laws and regulations.

Performance Domains and Associated Job Tasks
This JTA describes the professional duties and responsibilities expected of a practicing ACSM-CEP®. The JTA is divided into domains and associated tasks performed on the job. The percentages listed below indicate the portion of questions representing each domain on the 125-question ACSM-CEP® examination.

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<td>Patient Assessment</td>
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<td>Exercise Testing</td>
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<td>Exercise Prescription</td>
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<td>Exercise Training and Leadership</td>
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<td>Education and Behavior Change</td>
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Original 2013 (SA), ’14,’15 (EAW), ’16–’19 (STA)
ACSM Certified Clinical Exercise Physiologist® (ACSM-CEP®) Content Outline (2018)

Chronic disease includes, but are not limited to, cardiovascular, pulmonary, metabolic, orthopedic/musculoskeletal, neuromuscular, neoplastic, immunologic and hematologic disorders.

Domains/Tasks Cognitive Level Domain I: Patient Assessment

A. Assess a patient’s medical record for information related to their visit.

1) Knowledge of:
   a) the procedure to obtain patient’s medical history through available documentation.
   b) the necessary medical records needed to properly assess a patient, given their diagnosis and/or reason for referral.
   c) the procedure to obtain physician referral and medical records required for program participation.
   d) information and documentation required for program participation.
   e) the epidemiology, pathophysiology, progression, risk factors, key clinical findings and treatments of chronic diseases.
   f) the techniques (e.g., lab results, diagnostic tests) used to diagnose chronic diseases, their indications, limitations, risks, normal and abnormal results.
   g) medical charting, terminology and common acronyms.

2) Skill in:
   a) interpreting information from medical records in patient care and/or exercise prescription.
   b) assessing various vital signs.
   c) assessing participant physician referral and/or medical records to determine program participation status.

B. Interview patient regarding medical history for their visit and reconcile medications.

1) Knowledge of:
   a) establishment of rapport through health counseling techniques (e.g., the patient-centered approach), and nonjudgmental positive regard in creation of collaborative partnership.
   b) use of open-ended inquiry, active listening and attention to nonverbal behavior, interest and empathy.
   c) information and documentation required for program participation.
   d) the procedure to obtain informed consent from patient to meet legal requirements.
   e) commonly used medications in patients with chronic diseases, their mechanisms of action, and side effects.
   f) medical charting, terminology and common acronyms.

2) Skill in:
   a) administering informed consent.
   b) interviewing patient for medical history pertinent to the reason for their visit and reconciling medications.
   c) active listening and usage of health counseling techniques.
   d) data collection during baseline intake assessment.
   e) proficiency in medical charting.

C. Obtain and assess resting biometric data (e.g., height, weight, ECG, arterial oxygen saturation, blood glucose, body composition, spirometry).
1) Knowledge of:
a) best practice-based intake assessment tools and techniques to assess and interpret clinical and health measures (e.g., height, weight, anthropometrics, body mass index, resting energy expenditure).
b) medical therapies for chronic diseases and their effect on resting vital signs and symptoms.
c) normal cardiovascular, pulmonary and metabolic anatomy and physiology.
d) techniques for assessing signs and symptoms (e.g., peripheral pulses, blood pressure, edema, pain).
e) 12-lead and telemetry ECG interpretation for normal sinus rate and rhythm or abnormalities (e.g., arrhythmias, blocks, ischemia, infarction).
f) ECG changes associated with, but not limited to, drug therapy, electrolyte abnormalities, myocardial injury and infarction, congenital defects, pericarditis, pulmonary embolus and the clinical significance of each.

2) Skill in:
a) administering and interpreting resting biometric data to determine baseline health status.
b) preparing a patient and ECG electrode application for resting ECGs.
c) assessing vital signs and symptoms at rest.
d) assessing ankle brachial index using a hand-held Doppler

D. Determine a sufficient level of monitoring/supervision based on a preparticipation health screening.

1) Knowledge of:
a) normal physiologic responses to exercise. b) abnormal responses/signs/symptoms to exercise associated with different pathologies (e.g., cardiovascular, pulmonary, metabolic). c) pertinent areas of a patient’s medical history (e.g., any symptoms since their procedure, description of discomfort/pain, orthopedic issues). d) indications and contraindications to exercise testing and training. e) current published guidelines for treatment of cardiovascular, pulmonary and metabolic pathologies (e.g., American College of Cardiology/American Heart Association [ACC/AHA] Joint Guidelines, Global Initiative for Chronic Obstructive Lung Disease [GOLD], American Diabetes Association [ADA]). f) industry recognized preparticipation health screening practices (e.g., the Physical Activity Readiness Questionnaire for Everyone [PAR-Q+], ACSM’s preparticipation screening algorithm). g) medical therapies for chronic diseases and their effect on the physiologic response to exercise. h) the timing of daily activities (e.g., medications, dialysis, meals, glucose monitoring) and their effect on exercise in patients with chronic diseases. i) abnormal signs and symptoms in apparently healthy individuals and those with chronic disease. j) methods used to obtain a referral for clinical exercise physiology services.

2) Skill in:
a) implementing industry-recognized preparticipation health screening practices. b) administering informed consent. c) selecting an exercise test based on a patient’s disease, condition and ability. d) determining risk and level of monitoring of patient using health history, medical history, medical records and additional diagnostic assessments. e) modifying exercise/physical activity program in response to medication use, timing and side effects.

E. Assess patient goals, needs and objectives based on health and exercise history, motivation level and physical activity readiness.

1) Knowledge of:
a) patient-centered health counseling techniques with nonjudgmental positive regard.
b) assessment of patient goals and exercise history through use of open-ended inquiry, active listening and attention to nonverbal behavior and reflective listening.
c) the effects of a sedentary lifestyle, including extended periods of physical inactivity and approaches to counteract these changes.
d) behavior modification tools and techniques to assess patient’s expectations, goals and motivation level (e.g., health literacy, identification of real and perceived barriers, decisional balance).
e) common barriers to exercise compliance and adherence (e.g., physical/disease state, environmental, demographic, vocation).
f) known demographic factors related to likelihood of adherence and maintenance of exercise (e.g., age, gender, socioeconomic status, education, ethnicity).
g) characteristics associated with poor adherence to healthy behaviors (e.g., low self-efficacy, poor social support).
h) psychological issues associated with acute and chronic illness (e.g., anxiety, depression, social isolation, suicidal ideation).
i) validated tools for measurement of psychosocial health status.
j) a variety of behavioral assessment tools (e.g., SF-36, health-related quality of life, Chronic Respiratory Disease Questionnaire) and strategies for their use.
k) recognizing adverse effects of exercise in apparently healthy persons or those with chronic disease.

2) Skill in:
a) active listening and behavior modification techniques.
b) counseling techniques and strategies to overcome real and perceived barriers.
c) applying health behavior theories and strategies to strengthen patient barriers self-efficacy and optimize compliance and adherence in support of achievement of goals.
d) adapting/modifying an exercise program based on unique needs of a patient.
e) administering commonly used screening tools to evaluate mental health status.

Domain II: Exercise Testing

A. Select, administer and interpret submaximal aerobic exercise tests (e.g., treadmill, step test, 6-minute walk).

1) Knowledge of:
a) tests to assess submaximal aerobic endurance.
b) the acute and chronic responses to aerobic exercise on the function of the cardiovascular, respiratory, musculoskeletal, neuromuscular, metabolic, endocrine and immune systems in trained and untrained individuals.
c) the mechanisms underlying the acute and chronic responses to aerobic exercise on the function of the cardiovascular, respiratory, musculoskeletal, neuromuscular, metabolic, endocrine and immune systems in trained and untrained individuals.
d) the effect of chronic diseases on acute and chronic responses to aerobic exercise.
e) standard and/or disease-specific endpoints for submaximal aerobic exercise tests in apparently healthy individuals and those with chronic disease.
f) typical submaximal aerobic test results and physiological values in trained and untrained individuals and those with and without chronic diseases.
g) abnormal signs and symptoms in apparently healthy individuals and those with chronic disease.
h) abnormal readings and results from exercise testing equipment (e.g., treadmill, ergometers, electrocardiograph, spirometer, metabolic cart, sphygmomanometer) that may indicate equipment malfunction.
i) commonly used medications in patients with chronic diseases, their mechanisms of action and side effects.

2) Skill in:
a) selecting the appropriate exercise test based on a patient’s disease, condition and ability.
b) administering and interpreting of submaximal aerobic exercise tests.
c) modifying submaximal aerobic test and/or interpretation of results in response to medication use, timing and side effects.

B. Select, administer and interpret tests to assess musculoskeletal fitness, mobility and balance.

1) Knowledge of:
a) tests to assess muscular strength, muscular endurance, flexibility and mobility. b) the acute and chronic responses to resistance exercise on the function of the cardiovascular, respiratory, musculoskeletal, neuromuscular, metabolic, endocrine and immune systems in trained and untrained individuals. c) tests to assess function and balance. d) the acute and chronic responses to flexibility and mobility exercise on the function of the cardiovascular, respiratory, musculoskeletal, neuromuscular, metabolic, endocrine and immune systems. e) the mechanisms underlying the acute and chronic responses to resistance exercise on the function of the cardiovascular, respiratory, musculoskeletal, neuromuscular, metabolic, endocrine and immune systems in trained and untrained individuals. f) the effects of chronic diseases and their treatments on acute and chronic responses to resistance exercise, and an individual’s flexibility and mobility. g) standard and/or disease-specific endpoints for muscular strength, endurance, functional and balance testing in apparently healthy individuals and those with chronic disease. h) typical muscular strength, muscular endurance, functional and balance test results and physiological values in trained and untrained individuals and those with and without chronic diseases. i) commonly used medications in patients with chronic diseases, their mechanisms of action and side effects.

2) Skill in:
a) selecting an exercise test based on a patient’s disease, condition and ability. b) administering and interpreting tests to assess muscular strength and endurance. c) administering and interpreting functional and balance tests. d) modifying musculoskeletal fitness, mobility and balance tests and/or interpretation of results in response to medication use, timing and side effects.

C. Select, prepare and administer maximal, symptom-limited exercise tests.

1) Knowledge of:
a) contraindications to symptom-limited, maximal exercise testing and factors associated with complications (e.g., probability of coronary heart disease, abnormal blood pressure). b) medical therapies for chronic diseases and their effect on the physiologic response to exercise. c) current practice guidelines/recommendations (e.g., AHA, Arthritis Foundation, National Multiple Sclerosis Society) for the prevention, evaluation, treatment and management of chronic diseases. d) the timing of daily activities (e.g., medications, dialysis, meals, glucose monitoring) and their effect on exercise in patients with chronic diseases. e) cardiovascular, pulmonary and metabolic pathologies, their clinical progression, diagnostic testing and medical regimens/procedures to treat. f) normal and abnormal endpoints (i.e., signs/symptoms) for termination of exercise testing. g) abnormal signs and symptoms in apparently healthy individuals and those with chronic disease. h) medical therapies for chronic diseases and their effect on resting vital signs and symptoms.
i) commonly used medications in patients with chronic diseases, their mechanisms of action and side effects.

j) procedures to prepare a patient for ECG monitoring, including standard and modified lead placement.

k) tools to guide exercise intensity (e.g., heart rate, perceived exertion, dyspnea scale, pain scale).

l) the use of effective communication techniques (e.g., active listening and attention to nonverbal behavior, open-ended questioning, reflective listening skills) to address any concerns with the exam procedures.

m) tests to assess maximal exercise tolerance.

n) the physiologic responses during incremental exercise to maximal exertion in trained and untrained individuals and those with and without chronic diseases.

o) standard and/or disease-specific endpoints for maximal exercise testing in apparently healthy individuals and those with chronic disease.

p) typical maximal exercise test results and physiological values in trained and untrained individuals and those with and without chronic diseases.

q) medical therapies for chronic diseases and their effect on clinical measurements and the physiologic response to maximal exercise.

2) Skill in:

a) administering a symptom-limited, maximal exercise test.

b) preparing a patient for ECG monitoring during exercise.

c) assessing vital signs and symptoms at rest and during exercise.

d) interpreting ECG rhythms and 12-lead ECGs.

D. Evaluate and report results from a symptom-limited maximal exercise test to medical providers and in the medical record as required.

1) Knowledge of:

a) the effects of chronic diseases on acute responses to maximal exercise.

b) standard and/or disease-specific endpoints for maximal exercise testing in apparently healthy individuals and those with chronic disease.

c) abnormal signs and symptoms in apparently healthy individuals and those with chronic disease during maximal exercise testing.

d) typical maximal exercise test results and physiological values in trained and untrained individuals and those with and without chronic diseases.

e) medical therapies for chronic diseases and their effect on clinical measurements and the physiologic response to maximal exercise.

f) the interpretation of maximal exercise test measures (e.g., ECG response, oxygen saturation, rate-pressure product, claudication) and prognostic tools (e.g., Duke Treadmill Score) in context with the indication for the test, termination reason and the patient’s medical history.

2) Skill in:

a) interpreting and reporting results from a symptom-limited, maximal exercise test.

E. Identify relative and absolute contraindications for test termination and report to medical personnel as needed.

1) Knowledge of:

a) absolute contraindications and endpoints for terminating exercise testing.

2) Skill in:

a) interpreting and reporting results from a symptom-limited, maximal exercise test.

b) assessing vital signs and symptoms at rest and during exercise.
c) interpreting ECG rhythms and 12-lead ECGs.

**Domain III: Exercise Prescription**

**A. Develop individualized exercise prescription to support patient needs and goals for various exercise environments (e.g., home/community based, facility based, virtual).**

1) Knowledge of:
   a) appropriate mode, volume and intensity of exercise to produce favorable outcomes in apparently healthy individuals and those with chronic disease.
   b) the FITT-VP (frequency, intensity, time, type, volume, progression) principle for aerobic, muscular fitness/resistance training and flexibility exercise prescription.
   c) the benefits and risks of aerobic, resistance and flexibility exercise training in apparently healthy individuals and those with chronic disease.
   d) the effects of physical inactivity and methods to counteract these changes.
   e) normal and abnormal physiologic responses to exercise in healthy individuals and those with chronic diseases.
   f) the timing of daily activities (e.g., medications, dialysis, meals, glucose monitoring) and their effect on exercise training in patients with chronic diseases.
   g) disease-specific strategies or tools (e.g., breathing techniques, assistive devices, prophylactic nitroglycerin) to improve exercise tolerance in patients with chronic disease.
   h) appropriate modifications to the exercise prescription in response to environmental conditions in apparently healthy individuals and those with chronic disease.
   i) current practice guidelines/recommendations (e.g., U.S. Department of Health and Human Services, American College of Sports Medicine, Arthritis Foundation) for exercise prescription in apparently healthy individuals and those with chronic disease.
   j) applying metabolic calculations.
   k) proper biomechanical technique for exercise (e.g., gait assessment, proper weight lifting form).
   l) muscle strength/endurance and flexibility modalities and their safe application and instruction.
   m) principals and application of exercise session organization.
   n) known demographic factors related to likelihood of adherence and maintenance of exercise (e.g., age, gender, socioeconomic status, education, ethnicity, vocation).
   o) psychological issues associated with acute and chronic illness (e.g., anxiety, depression, social isolation, suicidal ideation).
   p) goal setting (e.g., SMART goals), reviewing, and constructive feedback in identifying barriers and reinforcing positive changes.
   q) risk factor reduction programs and alternative community resources (e.g., dietary counseling, weight management, smoking cessation, stress management, physical therapy/back care).
   r) incorporating health behavior theories into clinical practice.

2) Skill in:
   a) interpreting functional and diagnostic exercise testing with applications to exercise prescription.
   b) interpreting muscular strength/endurance testing with applications to exercise prescription.
   c) developing an exercise prescription based on a participant’s clinical status and goals.
   d) applying metabolic calculations.
   e) applying strategies to reduce risk of adverse events during exercise (e.g., gait belt, blood glucose monitoring).
   f) individualizing home exercise programs.
   g) optimizing patient compliance and adherence of exercise prescription.
B. Communicate the exercise prescription, including the use of exercise equipment, and the importance of promptly reporting any adverse reactions or symptoms.

1) Knowledge of:
   a) normal and abnormal physiologic responses to exercise in healthy individuals and those with chronic diseases. b) the timing of daily activities (e.g., medications, dialysis, meals, glucose monitoring) and their effect on exercise training in patients with chronic diseases and how to communicate this information with patient. c) lay terminology for explanation of exercise prescription. d) the operation of various exercise equipment/modalities. e) proper biomechanical technique for exercise (e.g., gait assessment, proper weight lifting form). f) muscle strength/endurance and flexibility modalities and their safe application and instruction. g) principals and application of exercise session organization. h) proper protocol to report adverse symptoms per facility policy.

2) Skill in:
   a) communicating exercise prescription, exercise techniques and organization of exercises.

C. Explain and confirm patient understanding of exercise intensity and measures to assess exercise intensity (e.g., target heart rate, RPE, signs/symptoms, talk test).

1) Knowledge of:
   a) tools to guide exercise intensity (e.g., heart rate, RPE, dyspnea scale, pain scale, talk test). b) abnormal signs and symptoms during exercise training in apparently healthy individuals and those with chronic disease. c) clear communication using patient learning style and/or health literacy to explain exercise intensity assessment. d) clear communication through effective communication techniques (e.g., active listening and attention to nonverbal behavior, open-ended questioning, reflective listening skills).

2) Skill in:
   a) teaching methods used to guide exercise intensity.

D. Evaluate and modify the exercise prescription based on the patient’s compliance, signs/symptoms and physiologic response to the exercise program, as needed.

1) Knowledge of:
   a) physiologic effects due to changes in medical therapies for chronic diseases and their impact on exercise training. b) typical responses to aerobic, resistance and flexibility training in apparently healthy individuals and those with chronic disease. c) the timing of daily activities (e.g., medications, dialysis, meals, glucose monitoring) and their effect on exercise in patients with chronic diseases. d) disease-specific strategies or tools (e.g., breathing techniques, assistive devices, prophylactic nitroglycerin) to improve exercise tolerance in patients with chronic disease. e) abnormal signs and symptoms during exercise training in apparently healthy individuals and those with chronic disease. f) mode, volume and intensity of exercise to produce favorable outcomes in apparently healthy individuals and those with chronic disease. g) commonly used medications in patients with chronic diseases, their mechanisms of action and side effects. h) modifications to the exercise prescription in response to environmental conditions in apparently healthy individuals and those with chronic disease. i) systems for tracking participant progress in both preventive and rehabilitative exercise programs. j) participant
progress in a preventive and rehabilitative exercise program given gender, age, clinical status, pre-program fitness level, specifics of the exercise program (e.g., walking only vs. comprehensive monitored program) and rate of program participation.

2) Skill in:
   a) helping patients identify barriers and providing strategies to overcome them. b) assessing adequacy of patient’s progress in a preventive or rehabilitative exercise program given age, sex, gender, clinical status, specifics of the exercise program and rate of program participation. c) developing an individualized exercise prescription. d) using patient feedback and developing individualized exercise prescription and/or care plan. e) active listening. f) modifying an exercise prescription specifically to meet a patient’s individual needs and goals.

Domain IV: Exercise Training and Leadership

A. Discuss and explain exercise training plan, patient and clinician expectations and goals.

   1) Knowledge of:
      a) health counseling techniques (e.g., the patient-centered approach) and nonjudgmental positive regard in creation of collaborative partnership. b) effective communication techniques, while using clear, patient-friendly terms (e.g., active listening, body language, motivational interviewing). c) factors related to health literacy skills and capacity. d) cardiovascular, pulmonary and metabolic pathologies, their clinical progression, e) diagnostic testing and medical regimens/procedures to treat. f) the FITT-VP principle (frequency, intensity, time, type, volume, progression) for aerobic, muscular fitness/resistance training and flexibility exercise prescription. g) the timing of daily activities (e.g., medications, dialysis, meals, glucose monitoring) and their effect on exercise training in patients with chronic diseases. h) disease-specific strategies or tools (e.g., breathing techniques, assistive devices, prophylactic nitroglycerin) to improve exercise tolerance in patients with chronic disease. i) exercise training concepts specific to industrial or occupational rehabilitation, such as work hardening, work conditioning, work fitness and job coaching. j) commonly used medication for cardiovascular, pulmonary and metabolic diseases.

   2) Skill in:
      a) identifying unique needs of those with chronic diseases in exercise prescription. b) communicating the exercise prescription and related exercise programming techniques. c) educating patients following the observation of problems with comprehension and performance of their exercise program. d) applying techniques to reduce risks of adverse events during exercise (e.g., gait belt, blood glucose monitoring). e) educating participants on the use and effects of medications. f) communicating with participants from a wide variety of educational backgrounds. g) using patient feedback to develop individualized exercise prescription and/or care plan. h) active listening.

B. Identify, adapt and instruct in cardiorespiratory fitness, muscular strength and endurance, flexibility, coordination and agility exercise modes.

   1) Knowledge of:
      a) the selection, operation and modification of exercise equipment/modalities based on the disease, condition and ability of the individual. b) proper biomechanical technique for exercise (e.g., gait, weight lifting form). c) exercise techniques to reduce risk and maximize the development of cardiorespiratory fitness, muscular strength and flexibility.
d) mode, volume and intensity of exercise to produce favorable outcomes in apparently healthy individuals and those with chronic disease.

e) disease-specific strategies or tools (e.g., breathing techniques, assistive devices, prophylactic nitroglycerin) to improve exercise tolerance in patients with chronic disease.

f) counseling techniques to optimize participant’s disease management, risk reduction and goal attainment.

g) modifications to the exercise prescription in response to environmental conditions in apparently healthy individuals and those with chronic disease.

h) the benefits and risks of aerobic, resistance and flexibility training in apparently healthy individuals and those with chronic disease.

2) Skill in:

a) identifying unique needs and goals of a patient and adapting/modifying an exercise program.

b) supervising and leading patients during exercise training.

c) communicating the exercise prescription and related exercise programming techniques.

d) educating patients following the observation of problems with comprehension and performance of their exercise program.

C. As indicated, provide patient monitoring (e.g., pulse oximetry, biometric data) and supervision during exercise.

1) Knowledge of:

a) normal and abnormal exercise responses, signs and symptoms associated with different pathologies (i.e., cardiovascular, pulmonary, metabolic, orthopedic/musculoskeletal, neuromuscular, neoplastic, immunologic and hematologic disorders).

b) normal and abnormal 12-lead and telemetry ECG interpretation.

c) exercise program monitoring (e.g., telemetry, oximetry, glucometry).

d) disease-specific strategies or tools (e.g., breathing techniques, assistive devices, prophylactic nitroglycerin) to improve exercise tolerance in patients with chronic disease.

e) the benefits and risks of aerobic, resistance and flexibility training in apparently healthy individuals and those with chronic disease.

f) the components of a patient’s medical history necessary to screen during program participation.

g) commonly used medications in patients with chronic diseases, their mechanisms of action and side effects.

h) the timing of daily activities with exercise (e.g., medications, meals, insulin/glucose monitoring).

i) how medications or missed dose(s) of medications impact exercise and its progression.

j) psychological issues associated with acute and chronic illness (e.g., depression, social isolation, suicidal ideation).

k) health counseling techniques and nonjudgmental positive regard.

2) Skill in:

a) monitoring and supervising patients during exercise training.

b) interpreting ECG rhythms and 12-lead ECGs.

c) recognizing adverse effects of exercise in apparently healthy persons or those with pathologies of acute and/or chronic disease.

d) applying and interpreting tools for clinical assessment (e.g., telemetry, oximetry and glucometry, perceived rating scales).

e) modifying exercise/physical activity programming in response to medication use, timing and side effects.

D. Evaluate the patient’s contraindications to exercise training and associated risk/benefit and modify the exercise/activity program accordingly.

1) Knowledge of:

a) the contraindications to exercise training and factors associated with complications in apparently healthy individuals and those with chronic disease.
b) the benefits and risks of aerobic, resistance and flexibility training in apparently healthy individuals and those with chronic disease.
c) abnormal signs and symptoms in apparently healthy individuals and those with chronic disease.
d) the acute and chronic responses to exercise training on the function of the cardiovascular, respiratory, musculoskeletal, neuromuscular, metabolic, endocrine and immune systems in trained and untrained individuals.
e) cardiovascular, pulmonary and metabolic pathologies, diagnostic testing and medical management regimens and procedures.

2) Skill in:
a) identifying contraindications to exercise training.
b) modifying the exercise program based on participant’s signs and symptoms, feedback and exercise responses.

E. Evaluate, document and report patient’s clinical status and response to exercise training in the medical records.

1) Knowledge of:
a) the techniques (e.g., lab results, diagnostic tests) used to diagnose different pathologies, their indications, limitations, risks, normal and abnormal results. b) the acute and chronic responses to exercise training on the function of the cardiovascular, respiratory, musculoskeletal, neuromuscular, metabolic, endocrine, and immune systems in trained and untrained individuals. c) normal and abnormal exercise responses, signs and symptoms associated with different pathologies (i.e., cardiovascular, pulmonary, metabolic, orthopedic/musculoskeletal, neuromuscular, neoplastic, immunologic and hematologic disorders). d) how chronic diseases may affect the acute and chronic responses exercise training. e) abnormal signs or symptoms which may be associated with worsening of a chronic disease. f) proper medical documentation according to generally accepted principles and individual facility standards. g) regulations relative to documentation and protecting patient privacy (e.g., written and electronic medical records, Health Insurance Portability and Accountability Act [HIPAA]).

2) Skill in:
a) summarizing patient’s exercise sessions, outcomes and clinical status into patient’s medical record. b) proficiency in medical charting.

F. Discuss clinical status and response to exercise training with patients and adapt and/or modify the exercise program, as indicated.

1) Knowledge of:
a) common barriers to exercise compliance and adherence (e.g., physical, environmental, demographic). b) effective communication techniques (e.g., active listening, body language).
c) techniques to adapt/modify exercise program based on a patient’s needs.
d) assess patient’s individual progress based on known cardiorespiratory fitness, muscular strength, and flexibility improvements expected within a given population.
e) assess patient’s tolerance to exercise modality and suggest comparable alternative modalities.

2) Skill in:
a) communicating health information based on a patient’s learning style and health literacy.
b) modifying the exercise program based on participant’s signs and symptoms, feedback and exercise responses.
c) summarizing patient’s exercise sessions, outcomes and clinical status into patient’s medical record.

G. Promptly report new or worsening symptoms and adverse events in the patient’s medical record and consult with the responsible health care provider.

1) Knowledge of:
   a) proper medical documentation according to generally accepted principles and individual facility standards. b) the scope of practice of health care professionals (e.g., physical therapist, nurse, dietician, psychologist). c) abnormal signs and symptoms during exercise training in apparently healthy individuals and those with chronic disease. d) the effects of chronic diseases on the acute and chronic responses to exercise training.

2) Skill in:
   a) assessing normal and abnormal response to exercise. b) educating patients following the observation of problems with comprehension and performance of their exercise program. c) evaluating and prompt reporting of a patient’s adverse response to an exercise program in accordance with a facility policy and procedures.

**Domain V: Education and Behavior Change**

**A. Continually evaluate patients using observation, interaction and industry-accepted tools, to identify those who may benefit from counseling or other mental health services using industry-accepted screening tools.**

1) Knowledge of:
   a) establishment of rapport through use of open-ended questions, active listening and attention to nonverbal behavior, interest and empathy. b) the psychological issues associated with acute and chronic illness (e.g., anxiety, depression, social isolation, hostility, aggression, suicidal ideation). c) theories of health behavior change (e.g., Social Cognitive Theory [SCT], Health Belief Model [HBM], Transtheoretical Model [TTM])). d) industry accepted screening tools to evaluate mental health status (e.g., SF-36, Beck Depression Index). e) signs and symptoms of failure to cope during personal crises (e.g., job loss, bereavement, illness). f) accepted methods of referral to behavioral health or other specialist as needed.

2) Skill in:
   a) administering commonly used screening tools to evaluate mental health status. b) applying and interpreting psychosocial assessment tools. c) identifying patients who may benefit from behavioral health services.

B. Assess patient’s understanding of their disease and/or disability and conduct education to teach the role of lifestyle in the prevention, management, and treatment of the disease.

1) Knowledge of:
   a) active listening, open-ended questioning, reflective listening skills. b) patient-centered health counseling techniques (e.g., Five-A’s Model, Motivational Interviewing). c) factors related to health literacy skills and capacity. d) barriers to exercise compliance (e.g., physical/disease state, psychological environmental, demographic). e) social ecological model.
f) psychological issues associated with acute and chronic illness (e.g., anxiety, depression, suicidal ideation).
g) theories of health behavior change (e.g., Social Cognitive Theory, Health Belief Model, Transtheoretical Model).
h) tools to determine a patient’s knowledge and their readiness to change (e.g., scoring rulers, decisional balance).
i) the benefits and risks of aerobic, resistance, flexibility, and balance training in apparently healthy individuals and those with chronic disease.
j) the health benefits of a physically active lifestyle, the hazards of sedentary behavior, and current recommendations from U.S. national reports on physical activity (e.g., U.S. Surgeon General, National Academy of Medicine).
k) abnormal signs and symptoms during rest and exercise in apparently healthy individuals and those with chronic disease.
l) the epidemiology, pathophysiology, progression, risk factors, key clinical findings, and treatments of chronic disease.
m) education content and program development based on participant’s medical history, needs and goals.
n) medical therapies and commonly used medications for chronic diseases and their effect on resting vital signs, clinical measurements, and the response to exercise.
o) disease-specific strategies and tools to improve exercise tolerance (e.g., breathing techniques, insulin pump use, prophylactic nitroglycerin).
p) risk factor reduction strategies (e.g., healthy nutrition, weight management/BMI, body composition, smoking cessation, stress management, back care, substance abuse).

2) Skill in:
a) assessing a patient’s educational needs.
b) communicating health information based on a patient’s learning style and health literacy.
c) developing educational materials and programs on disease and the role of lifestyle intervention.
d) teaching health information to patient’s in individual and group settings.
e) communicating exercise techniques, prescription and progression.

C. Apply health behavior change techniques (e.g., Motivational Interviewing, Cognitive Behavioral Therapy [CBT], Health Coaching) based upon assessment of readiness to change according to Transtheoretical Model (TTM).

1) Knowledge of:
a) active listening, open-ended questioning, reflective listening skills. b) barriers to exercise compliance and adherence (e.g., physical/disease state, psychological environmental, demographic, vocational). c) known demographic factors related to likelihood of adherence and maintenance of exercise (e.g., age, gender, socioeconomic status, education, ethnicity). d) characteristics associated with poor adherence to healthy behaviors. e) health counseling techniques (e.g., the patient-centered approach). f) goal setting (e.g., SMART goals), reviewing, and constructive feedback in support of patient for best likelihood of achievement of goals. g) theories of health behavior change (e.g., Social Cognitive Theory [SCT], Health Belief Model [HBM], Transtheoretical Model [TTM]). h) application of behavior-change techniques (e.g., motivational interviewing, cognitive-behavioral therapy, health coaching). i) eliciting change talk by patient through motivational interviewing technique. j) development of self-efficacy (task and barriers) in exercise behaviors.

2) Skill in:
D. Promote adherence to healthy behaviors through a patient centered approach (e.g., addressing barriers, engaging in active listening, expressing interest and empathy, increasing self-efficacy, teaching relapse prevention techniques and identifying support).

1) Knowledge of:
   a) establishment of rapport through use of open-ended questions, active listening and attention to nonverbal behavior, interest and empathy.
   b) health counseling techniques (e.g., the patient-centered approach) and nonjudgmental positive regard in creation of collaborative partnership.
   c) theories of health behavior change (e.g., Social Cognitive Theory [SCT], Health Belief Model [HBM], Transtheoretical Model [TTM]).
   d) barriers to exercise compliance and adherence (e.g., physical/disease state, psychological environmental, demographic, vocational).
   e) known demographic factors related to likelihood of adherence and maintenance of exercise (e.g., age, sex, gender, socioeconomic status, education, ethnicity).
   f) tools for measuring clinical exercise tolerance (e.g., heart rate, glucometry, subjective rating scales), and consideration of affect regulation in determining exercise prescription.
   g) risk factor reduction programs and alternative community resources (e.g., wellness coaching, smoking cessation, physical therapy/back care, dietary counseling).
   h) goal setting (i.e., SMART goals), reviewing, and constructive feedback in support of patient for best likelihood of achievement of goals.
   i) eliciting change talk by patient through motivational interviewing technique.
   j) development of self-efficacy (task and barriers) in exercise behaviors.
   k) promotion of patient intrinsic motivation (e.g., supporting feelings of autonomy and competence, positive feedback, enjoyment) in facilitating long-term adherence to exercise.
   l) community resources (exercise and/or health support) available for participant use following program conclusion and/or discharge.
   m) relapse prevention techniques (e.g., proactive problem solving, managing lapses, maintaining high self-efficacy in health behaviors, identifying social support).
   n) guidance of social support (e.g., reassurance, nurturance, supportive exercise groups).

2) Skill in:
   a) effective use of behavior-change techniques.
   b) active listening and receptiveness to patient feedback in decision making of exercise prescription and/or care plan.
   c) effective communication with participants from a wide variety of backgrounds.
   d) promoting patient engagement in process of fitness and health improvement.

Domain VI: Legal and Professional Responsibilities

A. Evaluate the exercise environment and perform regular inspections of any emergency equipment and practice emergency procedures (e.g., crash cart, activation of emergency procedures) per industry and regulatory standards and facility guidelines.
1) Knowledge of:
a) government and industry standards and guidelines (e.g., American Association of Cardiovascular and Pulmonary Rehabilitation [AACVPR], American College of Sports Medicine [ACSM], Academy of Nutrition and Dietetics, Health Insurance Portability and Accountability Act [HIPAA], Joint Commission: Accreditation, Health Care, Certification [JCAHO], Occupational Health and Safety Act [OHSA], Americans with Disabilities Act, American Diabetes Association [ADA]).
b) the operation and routine maintenance of exercise equipment.
c) current practice guidelines/recommendations for facility layout and design.
d) standards of practice during emergency situations (e.g., American Heart Association, American Red Cross).
e) local and institutional procedures for activation of the emergency medical system.
f) standards for inspection of emergency medical equipment.
g) risk-reduction strategies, universal precautions, basic life support, emergency equipment, and standard emergency procedures.

2) Skill in:
a) adhering to legal guidelines and documents.
b) implementing facility safety policies and procedures.
c) applying basic life support procedures (e.g., Cardiopulmonary resuscitation [CPR], automated external defibrillator [AED]).
d) the use of medical terminology.

B. Follow industry-accepted scopes of practice, ethical, legal (e.g., data privacy, informed consent), and business standards.

1) Knowledge of:
a) professional liability and common types of negligence seen in exercise rehabilitation and exercise testing environments. b) the legal implications of documented safety procedures, the use of incident documents, and ongoing safety training. c) the scope of practice of healthcare professionals (e.g., physical therapist, nurse, dietician, psychologist). d) current practice guidelines/recommendations (e.g., National Heart, Lung, and Blood Institute, Arthritis Foundation, National Multiple Sclerosis Society) for the prevention, evaluation, treatment, and management of chronic diseases. e) regulations relative to documentation and protecting patient privacy (e.g., written and electronic medical records, Health Insurance Portability and Accountability Act [HIPAA]).

2) Skill in:
a) proficiency in medical charting. b) applying industry and regulatory standards. c) adhering to legal guidelines and documents. d) the use of medical terminology.