

Department of Exercise Science

Handbook for Graduate Students

School of Public Health
University of South Carolina

2009 - 2010

(Revised 08-31-09 ljt)

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Section One

Academic Standards

Academic Standards

1. Graduate Studies Bulletin

It is the right and responsibility of every graduate student at USC to own and be familiar with a current copy of the [Graduate Studies Bulletin](#). The first part of this document contains general information concerning The University of South Carolina and The Graduate School. The [Graduate Studies Bulletin](#) also includes a complete section of information specific to the [Arnold School of Public Health](#); graduate degrees offered by the [Department of Exercise Science](#); and a description of graduate courses.

2. Academic Suspension Policy ("3.00 Rule")

Graduate degree-seeking students whose cumulative grade point average drops below 3.00 (**B**) will be placed on academic probation and allowed one calendar year in which to raise the grade point average to at least 3.00. In the case of conversion of grades of incomplete that cause a cumulative GPA to drop below 3.00, a degree-seeking student will be placed on academic probation at the end of the semester in which the grade is posted. Students whose cumulative GPA falls below the required minimum of 3.00 by receiving a grade for a course in which they received an **Incomplete** will, instead of a one-year probationary period, be granted only one major semester of probation dating from the semester in which the grade is received by the registrar in which to raise their cumulative GPA to 3.00 or above. Students who do not reach a cumulative 3.00 grade point average during the probationary period will not be permitted to enroll for further graduate course work as a degree or non-degree student.

3. Grade Point Averages

The student must maintain a GPA of at least 3.0 on a 4.0 scale on all courses attempted for graduate credit. The student must also maintain a GPA of at least 3.0 on a 4.0 scale on all courses numbered 700 or above.

4. "I" (Incomplete) to "F"

An "I" is a temporary mark that may be assigned at a professor's discretion to allow an additional specified amount of time to finish course requirements following illness, accident or unusual hardship. **A grade of "I" is automatically converted to a grade of "F" after one (1) year.** In the event of an "Incomplete" grade, the student must make arrangements with the course professor to finalize completion of the course.

5. Program of Study

The program of study lists all courses that a student must complete as a part of the degree to which he/she has been admitted. The program of study must be endorsed by the student, the student's advisor and the graduate director in accordance with the graduate curriculum for the Department of Exercise Science. **The approved program of study should be submitted no later than the student's second semester of study to the Graduate School for review and approval by the Graduate Dean.**

All courses in a program of study leading to the [M.S. degree](#) must be completed within a 6 year period from the date of admission to graduation. Courses not completed within this period must be retaken.

All courses in a program of study leading to the [Ph.D. degree](#) must be completed within an 8 year period from date of admission to graduation. Courses not completed within this period must be retaken.

6. Transfer Credits

A maximum of 12 credit hours may be approved by the Graduate School and the Department of Exercise Science as Transfer Credits toward earning a graduate degree. The following provisions apply:

- (1) The courses must be documented by an **official** transcript mailed to the Graduate School by the awarding institution.
- (2) The transcript must clearly indicate that **graduate** credit was awarded or specifically verified by the institution's Registrar or Graduate Dean.
- (3) The courses must be judged appropriate by the student's academic committee and listed on a program of study approved by the Graduate School.
- (4) Courses with grades lower than "B" are not transferrable.
- (5) There is no revalidation mechanism for courses completed at another institution.

A student that receives a Master's degree in Exercise Science from USC may apply 9 credit hours towards a PhD degree in Exercise Science from USC.

7. Facilities and Resources

Students who are involved in research projects associated with degree programs (i.e. master's theses, master's projects and dissertations) are required to be formally enrolled during the period that they are actively engaged in the project. Collection of data, laboratory analysis of data, computer analysis of data, manuscript review (with faculty) and revisions are examples of active engagement. The minimal enrollment is 1 credit. The student would normally be enrolled in either EXSC 798, EXSC 799, or EXSC 899, but enrollment in any course within the EXSC department or another university department will satisfy the requirement. This requirement is not meant to place undue burden upon students, but simply to reflect the involvement of the University's resources in the process. Students who enroll for research hours in a given semester must execute the work in the same semester.

Master's degree students taking the project-based curriculum should be cautioned that this regulation applies to them as well. A project student should not enroll in EXSC 798 until he/she is prepared to execute the work. A preliminary proposal for the project must be approved by the student's advisor prior to the student's enrollment in EXSC 798. Failure to complete the project

within the enrolled semester will require the student to register for at least one graduate credit each semester until the project is complete.

8. Application for Graduation

[Graduation Applications](#) must be turned into the Student Services Coordinator at the Arnold School of Public Health no later than 15 days after the beginning of the semester in which a student plans to graduate.

9. Student Assistance Program for Behavioral or Academic Problems

Faculty, staff and other students may notice behavior that appears unethical or unprofessional in a student enrolled in the program. In addition, a student may experience academic problems with selected course content. Independent observations of isolated events may not be sufficient to draw attention to a larger potential problem. For this reason, collective observations may assist in the identification of a significant problem and indicate a need for external assistance.

Faculty and staff of the department have established policies and procedures for assisting students who are exhibiting behavioral or academic problems. The objectives of this program are:

- The early identification of students exhibiting behavioral and/or academic problems that will be detrimental to their progression in the academic program or outside work experiences.
- The development of a remedial plan of action designed to assist a student in managing and addressing behavioral or academic problems.

The following procedures should be followed by faculty, staff or students who observe behavioral or academic problems on the part of a student enrolled in the exercise science or physical therapy program:

- (1) An individual who observes unusual behavior or poor academic performance (physical signs, emotional signs, or social interactions) should complete the Behavioral Report or Academic Problems Form. This form can be obtained from the departmental office.
- (2) The completed form should be returned to the departmental office. The confidentiality of the respondent will be assured.
- (3) Upon receipt of a completed form the Director of the Program will schedule an interview with each respondent.
- (4) The Director of the Program will maintain a confidential file of all submitted forms. In evaluating the nature of an individual student's problem, the Director will evaluate the number of forms submitted for a student, the nature of the problem and any additional information obtained from the respondent interview.

- (5) The Director of the Program will inform the student of the reported problem and will meet with the student.
- (6) The Director of the Program will synthesize all relevant information and submit a report to the faculty and solicit input regarding the appropriate steps for providing assistance to the involved student.
- (7) The Director of the Program will prepare a final report and define the steps to be taken to resolve the problem. A meeting will be held with the involved student to summarize the report and provide an opportunity for assistance. Both the student and Director will sign the report. The report will be placed in the student's file and destroyed upon completion of the remedial steps.
- (8) Students may also be referred to additional support agencies on campus including the [Counseling and Human Development Center](#) (Student Health Services) for professional and personal problems and [Educational Support Services](#) (Office of Student Development) for problems related to academic skills.
- (9) The Director of the Program will establish regularly scheduled meetings with the student to monitor progress and provide the faculty with relevant information regarding the student's progress.

10. [Counseling and Human Development Center](#)

[The Counseling and Human Development Center \(CHDC\)](#) is the primary counseling center on campus. Part of Student Health Services, it is committed to the educational, personal, social and emotional development of every student. The CHDC provides a wide variety of confidential services to students through a staff of counseling psychologists, a psychiatrist, a social worker, counselors and supervised interns.

The major emphases of the CHDC are providing: individual and group counseling, marital and relationship counseling, crisis intervention, psychological assessment, biofeedback training, outreach programming, and consultation. Brief psychiatric intervention is also available when necessary. The CHDC strives to provide services that are oriented toward prevention, remediation and developmental growth.

Limited services (up to 12 visits per year) are available at no cost to University students who have paid the University Activity Fee. All visits beyond 12 will be on a fee-for-service basis. Non-fee paying students are eligible to use the Center on a fee-for-service basis. The CHDC can also provide referrals to other professionals and organizations in the Columbia area. The Counseling and Human Development Center is fully accredited by the International Association of Counseling Services Inc., and adheres to the high standards associated with the profession. All client contacts are treated professionally and confidentially. The internship program is fully approved by the American Psychological Association. The Counseling Center is located on the seventh floor of the Byrnes Building or they can be reached at 777-5223.

11. Academic Assistance

The Academic Skills Program offers a wide variety of services designed to help students improve their reading and study skills. Students who are having difficulty with classes as well as students who are more successful may benefit from consultation with or participation in the Academic Skills Program.

Services include: individual skills counseling; study skills presentations; computer-assisted instruction; programs focusing on time management, speed reading and comprehension, test-taking skills and test anxiety reduction, note-taking and listening, vocabulary development, memory improvement, and textbook mastery. Academic assessment, learning-style assessment, and preparation for standardized admissions tests for graduate and professional schools are also available. For more information or to make an appointment call 803-777-6573.

12. Financial Aid

Information regarding financial aid may be obtained from the [Office of Student Financial Aid and Scholarships](#) at 803-777-8134 or by [e-mail](#).

Additional listing of student [assistance programs](#).

Section Two
Health and Safety

Health and Safety

1. Policy on Bloodborne Pathogens

Students enrolled in the program should be particularly aware of the potential contamination from infectious agents in the health care environment. “Standard Precautions” was mandated into standards on December 6, 1991 by the Occupational Safety and Health Administration in response to increasing public concern over possible transmission of the Acquired Immune Deficiency Syndrome (AIDS) virus and Hepatitis B virus. This standard states that any health care worker who might potentially come in contact with bodily fluids should be educated in infection control and should treat all bodily fluids as though they were potentially infected.

“Standard Precautions” is the international term used by the medical industry to describe the set of measures introduced to allow medical staff to safely handle material that may carry blood or body fluids.

2. Precautions for the Transmission of HIV and HBV

Basic training for students and faculty in the safe handling of bodily fluids and blood in conjunction with the following blood and bodily fluid precautions can prevent the transmission of blood borne agents.

1. All patients/participants, their blood and other bodily fluids will be considered to be infectious at all times.
2. Whether or not the patient/participant is known to be infected with HIV, HBV, the student/faculty will:
 1. Wash hands thoroughly with soap and water before and immediately after contact with patients, their blood, urine, or other bodily fluid.
 2. Wear gloves when handling patient’s or participant’s blood, bodily fluids, and/or items soiled with these fluids.
 3. Wear gown, mask and eye coverings when performing procedures where aerosolization or splattering is likely to occur.
 4. Consider sharp items (needles, pipette tips, scalpel blades etc.) as being potentially infective and handle with extreme care to prevent accidental injury.
 5. Dispose of sharp items in puncture-resistant containers immediately after use.
 6. Do not recap, purposefully bend, or otherwise manipulate by hand needles that are to be disposed.

7. Minimize the need for emergency mouth to mouth resuscitation by using pocket masks, bag valve masks or other ventilation devices.
 8. Clean up spills of blood or bodily fluids immediately with a disinfectant, and clean work areas with a disinfectant after work is completed.
 9. If a cut or abrasion is present, cover these with a waterproof dressing.
3. If an incident occurs, please follow the following instructions:
- a. Wash the exposed or injured area with soap and warm water for 10-15 minutes
 - b. Inform the lab manager or supervisor, if present
 - c. Incident occurs during normal hours (8AM to 4PM), report to the Richland Family Practice located on the first floor at 3209 Colonial Drive, Palmetto Richland Memorial Hospital Campus. Call 434-2479 or 434-6116
 - d. If incident occurs after normal working hours or on weekends and holidays, report to Emergency Department at Palmetto Richland Memorial Hospital
 - e. Those working in satellite clinics and hospitals out of town should seek treatment at the nearest hospital's emergency department
 - f. A USC incident report will need to be completed once treatment is initiated
 - g. If you need immediate assistance, call Campus Police at 7-9111 (24 hours a day, 7 days per week)

Graduate Student Requirements

1. Hepatitis B Vaccination Series

All students (Graduate Assistant, Graduate Students, DPT students) must complete the Hepatitis B vaccination series, show medical documentation of immunity or have a physician's letter showing inability to take the vaccination before beginning any lab, clinic, thesis, project, or course work. This is a firm requirement since many of our students are potentially exposed to blood and/or blood products, even during classroom activities. The vaccination series is available through private physicians, the health department or the Thomson Student Health Center at USC for a fee. No student will be allowed to begin working with biohazardous material until documentation of vaccination is provided to the Department. If a routine booster dose of Hepatitis B vaccine is recommended at a future date, such booster doses shall be required at the student's expense. Those students that choose to decline the Hepatitis B vaccination must sign a waiver form to be kept on file in place of the immunization record. Any student *employed* by the Department of Exercise Science

is eligible to receive the vaccination free of charge and should contact the Department Safety Manager for further information.

2. TB Skin Test

All students (Graduate assistants, graduate students and DPT students) must have on record the results of an **annual** TB skin test. The DPT student may be required to have a 2-step Mantoux TB test for some clinical affiliations. Any student who knows or feels that they may have been exposed to TB during the year is required to report this exposure to the Director of the Academic Program or Department Safety Manager and have an additional TB skin test performed. Any student *employed* by the Department of Exercise Science is eligible to receive the vaccination free of charge and should contact the Department Safety Manager for further information.

It is the responsibility of the student to have this test completed prior to enrollment and annually thereafter. Written verification must be in the student's file for the student to remain enrolled in the program. The student health services provide skin tests for a fee in the Student Health Center. Any student employed by the Department of Exercise Science is eligible to receive the TB test at no charge and should contact the Department Safety Manager for more information.

3. CPR

All Graduate Students, Graduate Assistants, and students enrolled in the DPT program are required to be certified in *adult* cardiopulmonary resuscitation (CPR) and must present their CPR card to the Department Safety Manager, where a photocopy will be kept on file. In addition, the DPT student should be certified to perform CPR on the *infant and child* as well. Every student should be certified by either the American Red Cross or the American Heart Association. It is the responsibility of the student to keep the certification current. Online CPR certifications are NOT accepted.

4. Bloodborne Pathogens Training

ALL students enrolled in the Exercise Science or DPT graduate program will be considered "at risk" of encountering biohazards and will be **required** to attend a seminar presented by the University's Occupational Health and Safety unit (Thomson Student Health Center), or complete a computer-based training course covering the safe handling of human bodily fluids and bloodborne pathogens. This training, entitled Bloodborne Pathogens, will be completed at the beginning of *each* academic year and it is the responsibility of the student to update the training annually. All students are expected to understand standard precautions and to practice these precautions in all health care and relevant educational and research settings as the minimum standard for prevention of transmission of bloodborne pathogens. In addition, each student will review the policy of his/her clinical affiliation prior to treating patients.

5. Laboratory Safety Training

All students (Graduate Assistants, Graduate Students, DPT Students) must complete a laboratory safety course, offered by USC Environmental Health and Safety Unit. The computer-based course, designed to cover safe practices in a laboratory setting, is offered on the [EHS](#) website and is accessible via any home computer with Internet access.

It is the responsibility of the student to complete this course prior to enrollment and annually

thereafter. Students' registration is subject to cancellation until this requirement is completed, since Exercise Science coursework involves laboratory activities. For the DPT student, this requirement begins in the second year and is required annually thereafter.

Additional DPT Requirements

The DPT requirements are described in full detail on the Health Information Form. Please consult the DPT Health Information Form or the DPT Clinical Coordinator for more information.

Tetanus-Diphtheria Booster

Chickenpox-Shingles

Pertussis Immunization History

Measles, Mumps, Rubella

Standard Precautions Test must be passed with 100% score.

Hazard Communications On-line Training must also be completed.

Hazards of TB Training

Personal Health Insurance Coverage or Insurance Coverage through the Graduate School is required

Section Three

Graduate Assistants

Required of Graduate Assistants

1. Professionalism/Standards

Graduate assistants are fully admitted graduate students who are paid employees of the University of South Carolina. As such they are expected to perform their assigned duties in a timely, effective and responsible manner. Graduate assistants play key roles in the Department of Exercise Science and the manner in which they perform their duties reflects importantly on the Department's reputation with students, clients, research subjects and other members of the University community.

Graduate assistants are typically appointed to 0.5 full time equivalent (FTE) positions and, accordingly, are assigned to work 20 hours per week throughout the semester. However, in some cases appointments are made at lower fractions of an FTE. Starting and finishing dates for work assignments are designated on a semester-to-semester basis and may vary with the nature of the specific assignment.

2. Lab Safety Training Course

The Department of Exercise Science requires all graduate students who are teaching or conducting research in the performance or biochemistry labs to attend a laboratory safety training course. An instructor led class provides the safety information and is required by OSHA for all personnel who will work in a laboratory setting. Training of personnel and proper handling of lab hazards can prevent accidents in the lab environment. This one-hour, in-class course is offered at various times throughout the semester. Students should contact the safety manager to schedule training course. See [course dates](#) on the EHS website.

3. Hazardous Waste Training Course

The Department of Exercise Science requires all *Applied Physiology* track graduate students to take an annual course on hazardous waste. This course reviews the definition of hazardous waste and also, the safe handling, labeling, storage, and removal of items deemed hazardous. This one-hour, in-class course is offered at various times throughout the semester and annual refresher training is offered online. See [course dates](#) on the EHS website.

4. Biosafety Training Course

The Department of Exercise Science requires all *Applied Physiology* track graduate students to take an annual course on biosafety. The biosafety training course will 1) define the responsibilities of all parties involved in obtaining and using biohazards at the University of South Carolina, 2) advise all individuals working with biohazards of their rights and responsibilities under Federal and State laws, 3) provide the worker with a reference so as to assist in the safe handling of pathogenic agents, 4) provide information on the proper treatment and disposal of wastes and 5) state the steps to be taken in the case of spills or other emergencies. This one-hour, in-class course is offered at various times throughout the semester and will be renewed annually. See [course dates](#) on EHS website.

5. Radiation Safety Training Course

Optional: A radiation safety training lesson has been developed for USC employees, students and/or visitors who are not actually working with radiation but have a need to visit research laboratories or medical offices where radioactive materials or radiation emitting devices may be present. ([Online training](#)) If you are going to use radioactive materials, x-ray machines or lasers in your research, you will be required to take one of our formal courses as soon as possible after you begin your work. Contact the departmental safety officer if you are in need of the radiation safety formal training course.

6. Animal Handling Course

Optional: The Animal Handling Course is required for all personnel that may work with animals. The intent of this 3-hour course is to familiarize students with appropriate precautions when working with animals, as well as how to handle animals safely to prevent injury to you and the animals. Additional tutorial sessions can be arranged to learn advanced techniques that may be necessary to fulfill either assistantship or thesis/dissertation responsibilities.

7. Placement/Assignment

Graduate assistantship work assignments are made on a semester-to-semester basis. These assignments are made by the Department Chair with input from the faculty. In making the assignments the following issues are considered:

- (1) the needs of the Department
- (2) interests of the graduate assistant
- (3) competencies and background of the graduate assistant.

While consideration is always given to the graduate assistant's preferences, the needs of the Department must take precedence.

8. University Workshop for Teaching Assistants

Graduate assistants who are assigned to serve as instructors in laboratory sections or other courses are required by the University to complete a workshop for teaching assistants. This workshop is typically held prior to the start of the Fall semester. Those graduate assistants who are required to complete this workshop will be notified by the Graduate Director.

9. Office Hours

It is both a University and Department requirement that graduate assistants with teaching responsibilities post and adhere to regular office hours. This should be a minimum of three hours per week. The purpose is to facilitate communication between students and their teaching assistant.

10. Enrollment Requirement

Graduate assistants are required to be registered as full time students during any semester in which they are appointed to an assistantship. Therefore, the minimum amount of credits a student must take in the Fall and Spring is **six** credits and the maximum is **twelve** credits. During summer sessions the minimum registration level is **one graduate** credit hour.

11. Appointment Dates; University Holidays vs. Assistantship Responsibilities

In general, graduate assistantship duties start on the date designated by the Department Chair at the beginning of each semester and extend through the end of the final exam period for the semester. Typically graduate assistants are not required to work during University holiday periods. However, in some special cases graduate assistants may be required to work during holiday periods. University Holidays are different from class holidays (i.e., Fall/Spring Break, Election Day). Graduate assistants will be notified of any special requirements at the time of assignment. In some cases additional compensation will be awarded to graduate assistants for work during holiday periods. Communicate with your faculty supervisor to determine dates you are expected to work in fulfillment of your responsibility as an employee.

12. Outside Employment

Graduate assistants who are appointed at the 0.5 FTE level (20 hours per week) are not permitted to be employed outside of the Department. This guideline applies to any activity that involves a continuing commitment to an outside employer for which compensation is made. This guideline does not apply to occasional, isolated activities (e.g., presentations, consultations, etc.).

13. Seminar Attendance

Approximately 6 to 8 departmental seminars are held each semester. Speakers are Departmental Faculty who present current research data, as well as visitors who are nationally and internationally recognized researchers. The date, time, location, speaker, and topic of these seminars will be posted. Graduate Assistants are required to attend these seminars.

14. Problems

Graduate assistants experiencing difficulties with an assigned work responsibility should bring such difficulties to the attention of the faculty supervisor as soon as possible. If the faculty supervisor is unable to resolve the difficulty, the graduate assistant should bring the problem to the attention of the Department Chair. Such difficulties should not be allowed to continue for a prolonged period before bringing them to the attention of the faculty supervisor and/or Department Chair.

Section Four

Programs of Study

1. Master of Science Degree Program

1. Master's Program Procedures and Requirements

1. Assignment of Academic Advisor

Students entering the graduate program in Exercise Science will be initially advised (first semester) by the degree coordinator in applied physiology, health aspects of physical activity or motor control/rehabilitation. During this advisement the student's interests will be discussed and an academic advisor will be assigned.

The student is to meet with their advisor prior to the start of each semester. The academic advisor and student are responsible for completing a program of study by the end of the second semester. The advisor and the student should review the student's academic performance and ensure that appropriate progress is being made to completion of the program of study. If academic problems arise the advisor will be directly involved in the resolution of the problem. Students may use the academic advisor to express concerns over the program or their future.

2. Program of Study

The program of study lists all courses that a student must complete as part of his/her degree program. The Program of Study form may be obtained from the departmental office and must be signed by the student, advisor, graduate director, and the Graduate Dean.

1. Composition

The Program of Study must include the following:

- The correct number of hours for the degree. No more than 6 hours may be in thesis preparation (EXSC 799).
- A maximum of three 500 level courses may be included on the Program of Study.
- No more than 6 hours of independent study.
- ! Only courses with dates of completion no more than 6 years prior to the satisfaction of all degree requirements.

The program of study must be forwarded to the Graduate School no later than the student's second semester of academic work.

2. Adjustments to the Program of Study

Circumstances that may require an adjustment to an approved Program of Study include:

- Substitution of one course for another on an approved Program of Study; or
- Deletion of a course from an approved Program of Study; or
- Addition of an additional course to an approved Program of Study.

The student must complete the form entitled [Request for Adjustment in Graduate Program](#), available on the Graduate School website. This form must be approved by the student's advisor, Graduate Director and the Dean of the Graduate School.

3. Comprehensive Exam

A comprehensive examination is administered by the Department of Exercise Science near the completion of the student's program of study. The comprehensive examination may be taken when the student has completed all but 2 major courses. The exam must be completed at least 15 days and not more than 2 years prior to the date at which all degree requirements are met.

Comprehensive exams are offered three times a year. Generally the exams are given in mid-February, mid-June and mid-October. Students will be required to sign-up for the exam in the Department office approximately one month in advance of the test date.

Preparation of the comprehensive exam will be completed by the graduate faculty. The exam will consist of essay questions designed to test the student's mastery of the subject matter. Project students will take the exam on two consecutive days (Monday and Tuesday) from 9am - Noon each day. Thesis students will take only the first day of exams. Thesis students will be tested orally at their thesis defense in place of the second day of written exams. The exam typically will include 3 questions for each day.

The Comprehensive Examination categories for **Applied Physiology** are as follows:

Day One Topical Areas (Project and Thesis Students)

1. Skeletal Muscle Exercise
2. Cardiorespiratory Exercise Physiology
3. Exercise and Health
4. Other Exercise Physiology (Environment, Ergogetic Aids . . .)

Day Two Topical Areas (Project Students)

1. Clinical Exercise Physiology
2. Physical Activity Program Evaluation

3. Physical Activity Program Applications of Clinical Exercise Physiology (Work Site, Health Outcomes, Disease . . .)

The Comprehensive Examination categories for **Motor Control & Rehabilitation** are as follows:

1. Motor Control
2. Research Design
3. Specialty areas designated by the student's Program of Study.

Comprehensive exams will be graded by at least 3 members of the graduate faculty. Two of the three readers must assign a passing grade for successful completion. Students failing in their initial examination will be required to repeat all or part of the exam. A second failure of the comprehensive exam will result in the student's release from the graduate program.

4. M.S. Thesis

Students following the thesis program will be assigned a Thesis Program Advisor. The Advisor will be assigned based upon time availability of the professors actively pursuing research in the area and interests of the student.

1. Thesis Committee

Each student, with the aid of the Advisor, will organize an Advisory Committee whose function is to act as critical reviewers of the thesis proposal and all activities associated with the thesis. The Advisory Committee is responsible for giving final approval to the thesis proposal, the thesis proposal presentation, the final written form of the thesis and the oral defense of the thesis. The Advisory Committee shall consist of a minimum of three and a maximum of five members, all of whom must have graduate faculty status. At least two must be members of the Department of Exercise Science. The names of the committee members must be filed with the Department Chair. Advisory Committee forms can be obtained in the departmental office.

2. Proposal

The student in the thesis program will develop a thesis proposal in conjunction with the Advisory Committee.

After the graduate student and advisor have discussed a proposed thesis topic, the student will prepare a brief preliminary proposal that includes a brief rationale for the study, a clear statement of the proposed topic, and reasonable detailed methodology to be used. This document must be approved by the advisor before proceeding any further.

The student and advisor may wish to schedule a pre-proposal committee meeting. The purpose of this meeting is to get committee input and consensus before beginning work on the thesis prospectus.

Once approval is given, the student will develop a thesis proposal. This proposal will be distributed to the thesis committee only when the advisor judges it to be ready to be read by the committee.

A thesis proposal generally should provide pilot data and/or other evidence that the procedures to be used are appropriate.

After a draft of the thesis proposal is approved by the advisor, it is distributed to the thesis committee and a thesis proposal defense is scheduled.

The thesis proposal abstract and notification of the proposal meeting will be circulated to all Faculty and students of the Department of Exercise Science at least 5 working days before the proposal meeting. The student is responsible for this notification.

After the thesis proposal presentation has been concluded, the Advisory Committee will either approve the proposal or make appropriate revisions. ***Primary data collection must not occur before final approval by the Advisory Committee.***

Approval of all theses which use human subjects must be obtained from the School of Public Health's Human Subject Committee before data collection can be undertaken.

3. Defense

The format of the written thesis must be consistent with Graduate School requirements/guidelines.

The body or text of the thesis must be in the form of a journal-style article and should be written in the style appropriate for the intended journal of publication.

Upon completion of the thesis, the student must notify the graduate faculty in writing at least 10 days in advance of the scheduled date of the thesis defense. A brief abstract of the thesis should accompany this notification.

Three copies of the thesis must be filed with the graduate school: one for the Caroliniana Library, one for the Cooper Library, and one for the Department of Exercise Science.

It is appropriate to provide the advisor and other committee members with a bound copy of the thesis.

4. Graduate School Guidelines

Guidelines concerning regulations for [Master's theses](#) are available from the Graduate School. A copy of the guidelines appear in the appendix. **It is the**

student's responsibility to obtain current guidelines concerning application for graduation and acceptable Master's thesis format.

5. Graduate School Deadlines

As with guidelines, deadlines for submitting theses and applications for graduation are subject to change. While these deadlines are posted in the Departmental Office, **it is the student's responsibility to be aware of these deadlines!** In general, the following date is important:

Deadline for Submission of Thesis/Dissertation is 20 days prior to graduation.

5. M.S. Project

1. Advisor

Students following the project option in exercise science will be assigned an advisor by the appropriate area coordinator, based on the interests of the student and upon time availability of professors actively pursuing research in that area. The advisor will be an active member of the Graduate Faculty of the Department of Exercise Science. The advisor has responsibility for:

- developing the specific course of study to be followed in the project; and
- final approval of the written project proposal and end project.

Each student in cooperation with the program advisor may form an advisory committee to aid in development of their program and project.

2. Department Project Guidelines

The primary purpose of the project is application of knowledge. Two bound copies of the project are required. One copy of the completed project must be filed with the advisor, while the second copy is placed in the Exercise Science Library.

2. Course Requirements

General Course Requirements - Master of Science (MS) (39-42 hours)

Exercise Science (15-21 hours)

Research/Statistical Methods (3-9 hours)

Electives (6-18 hours)

Project (3 hours) or Thesis (6 hours)

Required Courses for All Exercise Science MS Students (6 hours)

Bios 700 – Introduction to biostatistics or equivalent (*3h, Fall*)

EXSC 700 – Exercise and Public Health (*3h, Spring*)

1. Applied Physiology

Additional Required Courses for Applied Physiology Track (11 hours)

EXSC 742 – Clinical Exercise Testing (*1h, Fall*)
 EXSC 743 – Laboratory Measurements for Exercise Testing (*1h, Spring*)
 EXSC 780 – Physiology of Exercise (*3h, Fall*)
 EXSC 781 – Physiology, Exercise, and Disease (*3h, Spring*)
 EXSC 783 – Seminar in Exercise Science (*1h, 3h required, Spring / Fall*)

Advisor Approved Exercise Science Courses for Applied Physiology

EXSC 755 – Selected Topics in Exercise Science (*3*)
 EXSC 784 – Cardiovascular Testing & Programming (*3*)
 EXSC 785 – Advanced Exercise Physiology Laboratory (*3*)
 EXSC 790 – Independent Study (*1-3h, repeatable up to 6h*)
 EXSC 880 – Myology (*3*)
 EXSC 881 – Advanced Cardiorespiratory Exercise Physiology (*3*)
 EXSC 883 – Physical Activity, Chronic Diseases & Disabilities (*3*)

Electives (6-15)

Thesis or Project

EXSC 798 (*3*) or
 EXSC 799 (*6*)

Total: 39 Credits

2. Health Aspects of Physical Activity

Additional Required Courses for Health Aspects of Physical Activity (9 credits)

Bios 757 – Intermediate biostatistics (*3*)
 Epid 700 – Introduction to epidemiology (*3*)
 Hpeb 700 - Concepts and methods in health promotion (*3*) OR Hpeb 702 -
 Planning health promotion programs (*3*)

Advisor Approved Courses for Health Aspects of Physical Activity (9 credits)

Exsc 710 – Behavioral aspects of physical activity (*3*)
 Exsc 780 – Physiology of Exercise (*3*)
 Exsc 781 – Physiology, Exercise, & Disease (*3*)
 Exsc 784 - Cardiovascular/Pulmonary Testing and Programming (*3*)
 Exsc 778 – Exercise and childhood obesity (*3*)
 Exsc 779 – Exercise physiology of children and youth (*3*)
 Exsc 783 – Physical activity and the aging process (*3*)
 Hpeb 701 - Theoretical foundations of health promotion (*3*)
 Hpeb 710 – Evaluation of health promotion programs (*3*)

Electives (9-12)**Thesis or Project**

EXSC 799 (6) OR

EXSC 798 (3)

Total: 39 Credits**3. Motor Control and Rehabilitation****Additional Required Courses for Motor Control and Rehabilitation (12 hours)**

EXSC 731 – Mechanisms of Motor Skill Performance (3h, Spring)

EXSC 782 – Biomechanical Analysis of Motor Skills (3h, Fall)

PHYT 762 – Neuromuscular Conditions (3h, Spring)

EXSC 790 – Independent Study in Motor Development (3h, Fall)

Advisor Approved Courses for Motor Control and Rehabilitation (9-12 hours)

EXSC 563 - Physical Activity and Aging (3h, Spring)

EXSC 795 - Internship in Exercise Science (3h, Fall or Spring)

PSYC 730 - Survey of Biological Psychology (3h, Fall)

BIOS 757 - Intermediate Biostatistics (3h, Spring)

BIOS 840 - Research Design in the Biomedical Sciences or equivalent (3h)

EPID 700 - Introduction to Epidemiology (3h, Fall or Spring)

HPEB 710 - Evaluation of Health Promotion Programs (3h, Spring)

Free Electives (6-9 hours)**Research (3 or 6 hours)**

EXSC 799 - Thesis (6hr, Fall or Spring)

EXSC 798 – Project (3h, Fall or Spring)

Total: 39 Credits

2. Doctor of Philosophy Degree Program

The PhD program in Exercise Science is designed to prepare students for research careers in the exercise sciences; graduates are trained for entry into positions in universities, colleges, research institutes and research-oriented clinical settings. Areas of research emphasis correspond to those of the departmental faculty.

1. Doctoral Program Procedures and Requirements

Seven main stages in the completion of the requirements for a doctoral program can be identified and need to be accomplished in the following logical sequence:

1. Assignment of an Academic Advisor

The Coordinator of the Ph.D. Program for each area (Applied Physiology, Health Aspects of Physical Activity or Motor Behavior & Rehabilitation) will make the initial assignments of academic advisors for entering doctoral students. This assignment will be made on the basis of the student's indicated area of specialization and his/her specific interests within that area of specialization. Within the first semester of enrollment in the program, the student, with the advice and counsel of the initial faculty advisor will identify and finalize the 'permanent' program advisor.

2. Admission to Candidacy

No Program of Study or doctoral committee(s) will be formed or approved until the student is *officially* admitted to candidacy for the degree.

Prior to completion of 12 hours of course work in the PhD program the student must pass an admission to candidacy examination or Qualifying Examination. This is administered by the department in which the major work is to be done. The examination may be written, or oral and written.

The scope of the examination should be such that the program faculty can determine:

1. Potential for ongoing intellectual development
2. Capacity for critical analysis and synthesis of ideas
3. Ability to grasp major theoretical concepts
4. Knowledge in proposed field of study

After successful completion of the Qualifying Exam, the Graduate School will be notified by the Graduate Director. The Dean of the Graduate School will notify the applicant of his/her admission to candidacy. It is advisable that doctoral students complete the examination for admission to candidacy without undue delay. Students should understand that they proceed on their own responsibility until admission to candidacy is officially conferred. ***Admission to candidacy is a prerequisite for approval of the Program of Study.***

3. Qualifying Examination Procedures

The advisor, in conjunction with other members of the candidate's program committee, will develop questions for the examination.

At a designated time period of 3 hours over the course of one day, the candidate will write the examination. The student may use a computer.

The examination must be typed either during or after the examination period. It is the responsibility of the student to have the examination typed.

The written examination must be taken within the first 4 weeks of the semester before or in which the student completes the first 12 hours of course work. The student must indicate his/her intention to take the exam during the previous semester.

The examination will be evaluated within 2-3 weeks after it is completed.

The program committee members will evaluate the student's performance as either PASS or FAIL, with two of the three readers voting PASS for successful completion.

If the written examination is failed, the student must participate in a follow-up oral exam. The oral examination must be conducted within 3 weeks after notification of failure of the written examination. Two additional readings will be assigned to the student one week prior to the oral exam. ALL graduate faculty within the area of concentration will participate in the oral examination. The purpose of the oral exam is to determine the ability of the candidate to synthesize written material. A simple YES majority is required for admission to the doctoral program.

If the candidate fails the written but passes the oral exam, the student will be required to complete specified remedial work in writing during the next full year of study.

If the candidate fails both the written and oral examinations, admission to the doctoral program will be denied.

4. Approval of Required Committee(s)

The Graduate Dean must approve an advisory committee for the candidate before a Program of Study can be recommended for the PhD student. The student must submit to The Graduate School Form GS 48 "[Doctoral Committee Appointment Request](#)" which names the members for the 4 committees listed. In addition to securing the permission of Graduate Faculty members to be named to these committees, the composition of these committees must receive approval of both the Exercise Science Graduate Director and The Graduate Dean.

All committees requiring the Graduate Dean's approval must receive that approval *before* functioning as committees. Where alteration of committee membership is necessary, the change must be requested in writing with appropriate justification, and receive approval before a new member can serve.

5. Program of Study

The **Program Advisory Committee** includes 3 members in the Department of Exercise Science and 1 outside member. This committee provides curriculum advisement and designates specific course requirements on the student's Program of Study. This committee should be appointed no later than the date of the student's admission to candidacy.

The candidate's set of required courses is not established except by the full approval of the Program of Study committee. The comprehensive exam cannot be scheduled until all of the courses listed on the Program of Study are completed or are in progress.

General Information - The Program of Study (GS 51) lists *all* courses that must be completed as a part of the degree program. The Program of Study must be endorsed by the student, the major advisor, the Graduate Director, and the Graduate Dean. Admission to candidacy and approval of the doctoral advisory committee by the Graduate Dean must *precede* the submission of the Program of Study to the Graduate School.

General Program Requirements and Composition of the Program of Study - See Course Requirements Section on the following pages.

Residency Requirement - Doctoral students in the Department of Exercise Science must enroll in an approved program of study for at least 3 academic years. One calendar year (August - May) must be spent on the Columbia Campus as a full time student.

Adjustments to the Program of Study - The Program of Study represents a contract between the University, the Department and the student and once approved, it is binding unless all parties agree to its adjustment. Any adjustments to the program of study must be completed in writing and approved by all parties concerned.

6. Comprehensive Examination

The candidate must satisfactorily pass a comprehensive exam in the fields of study which he/she is pursuing. The comprehensive exam must include both written and oral components. The comprehensive exam content should reflect the student's curriculum as represented by the Program of Study. The degree must be completed within five years of the comprehensive exam.

The **Oral Comprehensive Examination Committee** includes 3 members with 1 member outside the Department of Exercise Science. This committee administers the

oral part of the comprehensive examination. The membership of the comprehensive exam committee must be approved by the Graduate Dean prior to the examination. In general, the program advisory committee will serve as the nucleus of the comprehensive exam committee.

Procedures

1. Health Aspects of Physical Activity and Motor Control & Rehabilitation:

The comprehensive exam will consist of 3 writing sessions, each of which is three to four hours in duration, as well as a two hour oral component.

The major professor generally will provide leadership in soliciting examination questions, organizing and formulating the specific content of the examination.

The comprehensive exam is to be taken after the candidate has completed all course work required in the Program of Study (except for those in which the student is currently enrolled). The exam must be successfully completed not less than 120 days prior to the date of expected degree completion.

Successful completion of the exam requires a recommendation of PASS by three out of four members of the Comprehensive Exam Committee. A PASS generally requires a score of 80% on each major section of the exam. Ph.D. candidates are expected to successfully complete the comprehensive exam in their first attempt. Only in extraordinary circumstances would a student be allowed to repeat the exam or a portion thereof.

The comprehensive exam must be successfully completed prior to beginning data collection for the dissertation.

2. Applied Physiology:

Process Overview

The comprehensive exam process for PhD students in the Applied Physiology Division of the Department of Exercise Science should be initiated during the immediate semester following the successful completion of the coursework included in the student's plan of study. This process is generally expected to occur immediately following the second year in the Doctoral program. The process, outlined below, will involve faculty committee approval of a grant proposal research topic. The student will then proceed to write and orally defending the grant proposal on the approved topic.

Grant Guidelines

Format: The grant is to follow the standard PHS 398 proposal format with a 25 page limitation for the research plan. The submitted grant should include an abstract, budget, budget justification, and research plan. The student will have no budget

restrictions, and it is realized preliminary data will be rare. Administrative pages will not be required.

Topic: The proposal must be original work formulated by the student that is not directly related to any ongoing or planned research projects or grants by their advisor, or other committee members. Additionally, this grant can not serve as a dissertation proposal by the student, and should be a distinct project from their future dissertation. The grant proposal must include an exercise component either as a treatment or outcome variable. The advisor or other committee members should only supply general guidance in conversations, and no formal editorial input. This is meant to be an original student composition.

Procedural Steps.

The process should be initiated during the immediate semester following the completion of all agreed upon coursework.

A comprehensive exam committee consisting of 4 graduate advising faculty should be formed. The committee make-up should consist of a least 2 faculty from the Applied Physiology Division, and at least one faculty member outside the Exercise Science Department.

An initial meeting will involve the approval of the comprehensive exam grant proposal topic by the committee members, after an overview presentation (20 min) of the topic by the PhD student. The student should include a rationale, purpose, hypothesis, and aims to be further developed in the written proposal. The committee can be sent a brief introduction / aims overview prior to the meeting. Additional work on the proposal may be required before official committee approval.

The due date of the written proposal and tentative oral defense should be agreed upon at the time of topic approval. The student will have no more than 30 days to submit a written copy of the grant to committee members, unless due to extenuating circumstances the committee approves an extension. The oral presentation and defense should be scheduled 7-14 days after the written grant due date.

The written grant proposal will be submitted to all committee members 30 days after the approval of the grant topic.

The grant proposal will be orally presented (20-30min) to the comprehensive exam committee, and defended. This should occur 7-14 days after the submission of the written proposal.

Committee members will vote to pass, conditionally pass, or fail the student based on the overall performance of the written grant and oral defense. A conditional pass may require remedial work in the area of identified weakness.

7. Ph.D. Dissertation

1. Dissertation Committees

This committee includes 3 or more members from the field of study and directs the student in the preparation of the dissertation. The dissertation must be accepted by this committee prior to the dissertation defense.

The Dissertation Oral Examination Committee includes 4 members, 1 of whom must be outside the Department of Exercise Science. This committee examines the student on the dissertation and informs the Graduate Dean as to whether the student passed or failed the dissertation defense. The dissertation cannot be submitted to the Graduate School until it has been approved and signed by the members of this committee.

2. **Dissertation Proposal Procedures**

Based on extensive review of the literature and pilot work, the student must propose and defend before the Dissertation Committee a research project that addresses a deficiency or weakness in the literature. The membership of the Dissertation Committee must be approved by the Graduate Dean prior to the defense of the dissertation proposal.

The Ph.D. candidate will develop a dissertation proposal using Departmental guidelines. Generally, the proposal document will include the following:

- Introduction in which the rationale for testing the hypothesis(es) is clearly stated, including limitations, delimitations and scope of the proposed investigation.
- Comprehensive Review of the Literature pertaining to the research question.
- DETAILED Methodology, including pilot data which corroborates the need for the research, provides data for power calculations and documents the validity and reliability of the selected methodologies.

The proposal is prepared by the candidate in conjunction with the chairperson of the dissertation committee. Once approved by the chairperson, it is then distributed to the other members of the dissertation committee and a proposal defense is scheduled.

An announcement of the day, time and location of the proposal defense must be circulated to the graduate students and faculty of the Department at least 10 days prior to the proposal defense. The student is responsible for circulating this announcement.

An abstract of the proposal must be circulated along with a re-notification of the proposal meeting to all members of the faculty five days before the date of the proposal meeting.

At the conclusion of the proposal presentation, the Dissertation Committee will either approve the proposal or make appropriate revisions. *Except under unusual circumstances, only pilot data collection can occur before final approval by the Dissertation Committee.*

Dissertations which use human subjects MUST receive approval from the School of Public Health Human Subject's Committee prior to data collection.

Candidates using animal models MUST participate in a short course on handling laboratory animals. These are offered on a regular basis. For specific information, contact the Manager of the Exercise Biochemistry Laboratory.

3. Dissertation Defense Procedures

The student must defend the results of his/her research before the Dissertation Committee and other interested parties.

During ALL phases of the completion of the dissertation, any candidate who uses University resources or facilities or confers with a Faculty member on dissertation work MUST be officially enrolled for dissertation credit.

The body or text of the completed dissertation must be in the format of a journal style article(s) and should be written in the style appropriate for the intended journal(s) of publication.

The candidate works under the guidance of the Chairperson of the Dissertation Committee and other committee members in preparing the manuscript for dispersal to the full Dissertation Committee.

Upon completion of the dissertation research, the candidate must notify the Graduate Faculty in writing at least 10 days prior to the scheduled defense. This written notification should include a brief abstract of the results, along with the date, time and location of the defense.

The candidate must successfully defend the final dissertation before the Dissertation Committee and other interested parties. The general format of a dissertation defense is as follows:

30 minutes: Presentation of Dissertation Research by the Candidate to include: Introduction, Rationale, Hypothesis(es), Methodology, Results, Interpretation/Discussion, Summary and Conclusions.

15 -20 minutes: Question/Answer Period by the Full Audience, after which all but the candidate and Committee Members are excused.

15 + minutes: Continued Questioning of the Candidate by the Committee

Final official approval of the dissertation is by majority vote of the Dissertation Committee. Signatures of Committee members on the title page constitute approval.

4. Submission of the Dissertation to the Graduate School

The successfully defended dissertation is submitted to the Graduate School in the accepted format specified according to Graduate School regulations (see ["Regulations for Doctoral Dissertations"](#)). The dissertation must be turned into the Graduate School at least 20 days before the end of the semester in which the student plans to graduate. Three copies of the dissertation must be filed with the Graduate School: one each goes to the Caroliniana Library, Cooper Library and the Department of Exercise Science. **A bound copy of the dissertation should also be provided to the candidate's Advisor/Chairperson of the Dissertation Committee.**

2. Curriculum

1. Doctoral Specialization in Applied Physiology

All PhD students in the Applied Physiology Division are required to fulfill the equivalent of the existing MS program with an emphasis in Applied Physiology or a closely related field. Core courses that fulfill this equivalent could include:

Introductory Biostatistics

Advanced Exercise Physiology I & II

It is also highly recommended that students applying for the Doctoral Specialization in Applied Physiology have successfully completed coursework in organic and biochemistry. Additionally, undergraduate biology (I & II) and anatomy and physiology (I & II) are required.

Students will complete an approved plan of study of up to 60 hours beyond the baccalaureate level or 30 hours beyond the master's level. The Program of Study form submitted to the Graduate School must contain at least 60 graduate credit hours. These hours include dissertation (EXSC 899; 12 hr), independent study (EXSC 790; 12 hr), and research seminar hours (EXSC 783; 5hr). The plan of study is developed between the student and their advisor, and then approved by division faculty. All students are required to complete course hours as follows:

- Exercise Science (12-18 hours)
- Research/Statistical methods (6-12 hours)
- Electives (18-30 hours)
- Dissertation (12 hours)

In consultation with their advisor, each student is to develop a cognate of emphasis, and electives should be related to this area of specialization. Students can develop a specialization in many areas including but not limited to immunology, cell biology, cancer, endocrinology, neuroscience, cardiovascular physiology, nutrition, and skeletal muscle physiology.

In addition to coursework, all Applied Physiology doctoral students are expected to be heavily involved in ongoing research in the Division of Applied Physiology during their time in the academic program.

Sample Applied Physiology: Course Options

Exercise Science

- EXSC 783 – Seminar in Exercise Science (*1hr, repeatable up to 5 hr*; required*)
- EXSC 785 – Advanced Exercise Physiology Laboratory (3)
- EXSC 790 – Independent Study in Exercise Science (*6 - 12hr total*)
- EXSC 880 - Myology and Exercise Science (3)
- EXSC 881 - Advanced Cardiorespiratory Exercise Physiology (3)
- EXSC 883 - Physical Activity, Chronic Disease, and Disabilities (3)

Biology

- BIOL 543 - Comparative Physiology (3)
- BIOL 748 - Molecular Endocrinology (3)

Immunology/Microbiology

- MBIM 710 - Advanced Immunobiology
- MBIM 720 - Comprehensive Microbiology
- BMSC 702 - Medical Cell Biology

Chemistry

- CHEM 751 - Biosynthesis of Macromolecules (3)
- CHEM 752 - Regulation & Integration of Metabolism (3)
- CHEM 753 - Enzymology and Protein Chemistry (3)

Pharmacology

- PCOL 705 - Biomedical Pharmacology (6)
- PCOL 735 - Cardiovascular Pharmacology (3)
- PCOL 745 - Metabolic Pharmacology (3)
- PCOL 750 - Protein Phosphorylation

Neuroscience/Psychology

PSYC 560 - Advanced Physiological Psychology (3)

BMSC 740 - Neuroscience

PHPH 745 -Neurophysiology

CBNS 761 - Advanced Reproductive Neuroendocrinology

Physiology

PHYL 701 - Physiology for Health Sciences (6)

PHYL 735 - Cardiovascular Physiology (3)

PHYL 745 - Neurophysiology (3)

PHYL 755 - Endocrine & Reproductive Physiology (3)

2. Doctoral Specialization in the Health Aspects of Physical Activity

All PhD students are required to fulfill the equivalent of the existing MS program in Exercise Science or a closely-related field. Courses that fulfill this equivalent could include:

Introductory Biostatistics

Intermediate Biometrics

Physiology of Exercise I

Physiology of Exercise II

Students ordinarily complete an approved program of study of up to 60 hours beyond the baccalaureate level or 30 hours beyond the master's level (including dissertation hours).

The Program of Study form submitted to the Graduate School must contain at least 60 graduate credit hours. All students are required to complete course hours as follows:

- Exercise Science (12-18 hours)
- Research/Statistical Methods (6-12 hours)
- Electives (18-30 hours)
- Dissertation (12 hours)

Electives should be completed in the student's specific area of emphasis. Programs of study are developed by the students in consultation with the Division faculty. The program of study must conform to requirements described in the Handbook for Graduate Students in Exercise Science and must be approved by the student's advisor and the Division faculty.

Students may elect to take their statistics and research design courses in biostatistics, epidemiology, or psychology, depending on their interests. Similarly, students can design a curriculum that emphasizes coursework in physical activity and epidemiology, physical activity and health promotion, physical activity and behavioral science, or physical activity and exercise physiology.

Examples of Course Options

Examples of suggested courses for a specialization in *Health Aspects of Physical Activity* are listed below. These courses are by no means exhaustive and can be supplemented with other courses approved by the student's advisor and Division faculty.

Exercise Science

- EXSC 710 - Behavioral Aspects of Physical Activity (3)
- EXSC 754 - Community-Based Physical Activity Interventions (3)
- EXSC 778 - Exercise and Childhood Obesity (3)
- EXSC 863 - Physical Activity and the Aging Process (3)
- EXSC 881 - Advanced Cardiorespiratory Exercise Physiology (3)
- EXSC 882 - Physical Activity and Health (3)
- EXSC 883 - Physical Activity, Chronic Disease, and Disabilities (3)

Epidemiology

- EPID 700 - Introduction to Epidemiology (3)
- EPID 701 - Concepts and Methods of Epidemiology (3)
- EPID 744 - Investigative Epidemiology: Cardiovascular Disease (3)
- EPID 820 - Seminar in the Epidemiology of Health Effects of Physical Activity (3)

Psychology

- PSYC 727 - Foundations in Community Psychology (3)
- PSYC 783 - Health Psychology/Behavioral Medicine (3)

Health Promotion Education and Behavior

- HPEB 701 - Theoretical Foundation of Health Education (3)
- HPEB 710 - Evaluation for Public Health Education Programs (3)
- HPEB 731 - Health Promotion for Older Adults (3)
- HPEB 748 - Community Health Development (3)
- HPEB 752 - Nutrition and Public Health (3)

3. Doctoral Specialization in Motor Control and Rehabilitation

All PhD students in Motor Control and Rehabilitation are required to fulfill the equivalent of the existing Exercise Science MS program in Motor Control and Rehabilitation or in a closely-related field.

Courses that fulfill this equivalent could include:

Introductory Biostatistics

Intermediate Biostatistics

Mechanisms of Motor Skill Performance

Impairment of Motor Functions

Students complete an approved program of study of 60 hours beyond the baccalaureate level or 30 hours beyond the master's level; this includes 12 dissertation hours (*EXSC 899-12h*). The Program of Study form submitted to the Graduate School must contain at least 60 graduate credit hours. Requirements are as follows:

- Exercise Science (12-18 hours)
- Research Methods/Statistics (6-12 hours)
- Electives (18-30 hours)
- Dissertation (12 hours)

Electives are to be completed in the student's specific area or emphasis. The program of study is developed by the student in consultation with his/her advisor and the Division faculty and must conform to requirements described in the Handbook for Graduate Students in Exercise Science. The program must be approved by the student's advisor and the Division faculty.

Students may fulfill the statistics and research design requirements through any of the following: biostatistics, epidemiology, psychology, statistics or education. The choice is contingent upon student interests and emphases and should be approved by the advisor.

Students can develop a program of study that emphasizes developmental motor control and rehabilitation, lifespan motor control, geriatric motor control and rehabilitation, or any combination thereof.

Sample Motor Control and Rehabilitation Course Options

The courses listed below are by no means exhaustive and can be supplemented with other courses approved by the faculty advisory committee.

Exercise Science

- EXSC 563 - Physical Activity and the Physical Dimensions of Aging (3)
- EXSC 700 - Exercise and Public Health (3)
- EXSC 778 - Exercise and Childhood Obesity (3)
- EXSC 782 – Mechanical Analysis of Motor Skills (3)
- EXSC 831 - Mechanisms of Motor Skill Performance II (3)
- EXSC 832 - Research Practicum in Motor Learning/Motor Performance (3)
- EXSC 862 - Analysis of Motor Impairments (3)
- EXSC 863 - Physical Activity and the Aging Process (3)

Anatomy

- ANAT 701 - Human Embryology and Gross Anatomy (8)
- ANAT 703 – Human Neuroanatomy (3)

Nursing

NURS 753 – Primary Care of Older Adults (3h)
NURS 755 – Restorative Care of Older Adults (3h)

Physical Therapy

PHYT 750 – Orthopaedic Physical Therapy (4h)
PHYT 751 – Orthopaedic Physical Therapy (4h)
PHYT 762 – Neuromuscular Conditions (3h)
PHYT 806 – Clinical Pathology-Differential Diagnosis (3h)
PHYT 810 – Neuromuscular Assessment & Treatment (4h)
PHYT 811 – Pediatrics and Orthotics (3h)

Psychology

PSYC 700 – Psychosocial Approaches to Gerontology (3h)
PSYC 732 - Assessment in Clinical Neuropsychology (3h)
PSYC 733 – Neuropsychology of Learning Disabilities (3h)
PSYC 751 – Survey of Developmental Psychology (3h)

Medicine

MEDI 700 – Medical Aspects of Aging (3h)

Neuroscience/Psychology

PSYC 560 - Advanced Physiological Psychology (3h)
BMSC 740 - Neuroscience (3h)
PHPH 745 - Neurophysiology (3h)

Approval of Plan of Study

As a general reminder, the Program of Study should be completed after the Qualifying Exam. The plan of coursework should also be agreed upon by the student's advisory committee.

3. Doctor of Physical Therapy

1. **Purposes and Goals of the Doctor of Physical Therapy (DPT) Program**

The goal of physical therapy is to improve a patient's functional ability by assessing, preventing and treating movement dysfunction and disability. Physical therapists are prepared in programs of study that provide courses and clinical laboratory experiences designed to develop the skills necessary to collect, analyze and report clinical data. The practice of physical therapy is regulated by each state and licensing requires proof of graduation from an accredited program of study (American Physical Therapy Association) and successful completion of a licensing examination.

The DPT program is designed to take full advantage of the existing faculty and other resources of the Department of Exercise Science and School of Public Health. The mission of the Department of Exercise Science is "to expand and disseminate the body of knowledge concerning the relationship between physical activity and health". As such, the DPT program interfaces well with the ongoing activities of the department and complements the existing graduate programs (M.S. and Ph.D.).

The purpose of the DPT program is to prepare students who possess the skills necessary to practice physical therapy and to conduct research and scholarly activity related to the profession of physical therapy. This curriculum is designed to develop clinically based research competence in students who will contribute to the knowledge base of the profession.

The DPT program's clinical and research focus is on health promotion, preventive care and maximizing a patient's functional ability through physical activity and exercise. Graduates are prepared to contribute to the physical therapy profession on several levels including as a clinical practitioner and/or as a faculty/researcher. Graduates are prepared to participate in the profession as both **reflective practitioners** and **clinical scientists**.

The **reflective practitioner** is one who has acquired the technical skills necessary to practice physical therapy and is skilled in acquiring information and using creative interventions to solve unique health care problems experienced by individuals across the lifespan. The DPT curriculum incorporates experiences that provide students with opportunities to develop the skills necessary to respond to problems encountered in the clinical setting and understand the consequences of their actions. A graduate's second level of contribution is as **clinical scientists**. Graduates are prepared to participate in research and scholarly activity relevant to the advancement of physical therapy as a scientifically-based clinical profession.

Goals of the DPT program are to produce graduates that;

- possess the skills necessary to practice physical therapy in a variety of clinical settings.

- have the ability to read and interpret research published in scientific and medical journals.
- have the skills necessary to evaluate the effectiveness of rehabilitative techniques and to incorporate new ideas into the profession.
- contribute to the profession's body of knowledge by actively conducting and publishing clinically-based research in scientific and professional journals.

2. Statement of Philosophy

The practice of physical therapy includes the examination, diagnosis and treatment of physical disabilities, movement dysfunction and pain. Physical therapists must be prepared to: collect relevant patient data, analyze and identify problems, establish appropriate treatment goals and priorities, formulate and implement treatment plans and evaluate the effectiveness of therapy.

Students entering the degree program have a broad educational background reinforced with experiences designed to provide a solid scientific foundation for graduate work. Instruction and experiences provided by this program contribute to the students' technical knowledge and develop intuitive skills necessary to be reflective practitioners. Graduates possess the ability to interpret scientific research, evaluate common clinical practice and design/conduct clinical and laboratory research that contributes to the profession. Research methodology is taught in the context of clinically relevant problems.

Curriculum content allows students to acquire knowledge in physical therapy and related disciplines through active participation in classroom, clinical and laboratory instruction. Program emphasis is on a life-span approach and appreciates the health needs of all individuals regardless of age, gender and cultural background. Graduates of the DPT degree are prepared to participate as members of the total health care team and recognize the value of collaboration with other professions. Students understand a life span perspective of function and appreciate that development of an individual is a process of constant integration beginning at conception and continuing throughout life.

The goal of this program is to produce graduates who possess the skills necessary to be reflective practitioners and conduct clinical research and scholarly activity relevant to the advancement of physical therapy as a science-based profession.

3. Student Responsibilities

1. Professional Organizations

Students enrolled in the DPT program are encouraged to be student members of the national and state chapter of the American Physical Therapy Association (APTA). Participation in national and state meeting is strongly encouraged. Students attending professional meetings will be excused from class and are required to contact the instructor to make up content. Students presenting at professional meeting will often be provided with financial support to partially cover their expenses. The amount awarded

will be individually determined by the core faculty. For additional information or to request funding contact the office of the program director.

2. Academic Responsibility

Students enrolled in the DPT program are governed by the University of South Carolina [Code of Academic Responsibility](#) which states; It is the responsibility of every student at the University of South Carolina at Columbia to adhere steadfastly to truthfulness and to avoid dishonesty, fraud, or deceit of any type in connection with any academic program.

Any student who violates this rule or who knowingly assists another to violate this rule shall be subject to discipline.

3. Attendance

Students enrolled in the DPT program are expected to attend, and be on time, to all classes unless otherwise excused. To be excused you are to notify the instructor of the course (preferably prior to the absence) to document the reason for the absence. Student absent from a class are expected to obtain the content of the class missed. Students exhibiting a pattern of unexcused absences shall be subject to discipline by the DPT faculty.

4. Remediation

Students receiving less than a passing grade (80 percent) on any evaluation (written or practical) in a PHYT course will be required to remediate that content. While the content and structure of the remediation sessions are course dependent (determined by the instructor), the remediation grading policy is consistent across all PHYT courses. Remediation is considered a second attempt to secure knowledge or clinical skills to insure that you are a safe and competent practitioner. Remediation is not used to replace a poor grade in a class. Remediation of an evaluation will not change your original score which will be used to calculate your final class average.

Students are provided only one attempt at remediation and if an evaluation is not successfully passed a second time, the student will be dropped from the class. If successful, remediation will result in the student being allowed to continue in the class. If at the conclusion of the semester, your final class average is below 80 percent due solely to remediation in the class, you will receive the minimum passing grade for the course. A faculty member can use a number of factors to determine your final grade. If other factors (other than those you have remediated) contribute to your final average falling below the minimum passing grade, the grade for the course will be determined by the instructor using the criteria established for the class.

In a given course, students are not expected to exhibit a pattern of needing remediation which might result in dismissal from the class ("pattern" determined by course instructor). Faculty observing a pattern of remediation will warn the student that further remediation will fail the class.

Remediation is a privilege provided by the faculty and is granted to students enrolled in the DPT program. Faculty will periodically review a student's academic performance across the program of study and may discipline a student who demonstrates a pattern of needing remediation. Faculty have the right to withdraw the opportunity for remediation from individual students abusing this privilege. Students having their remediation privilege revoked and not passing a subsequent evaluation (written or practical) will in failure of the course.

5. Ethical Behavior

Students enrolled in the DPT program are expected to adhere to the ethical standards of the Physical Therapy Profession. This [Code of Ethics](#), adopted by the American Physical Therapy Association, shall be binding on all students enrolled in the DPT Program.

PRINCIPLE 1

Physical therapists respect the rights and dignity of all individuals.

PRINCIPLE 2

Physical therapists comply with the laws and regulations governing the practice of physical therapy.

PRINCIPLE 3

Physical therapists accept the responsibility for the exercise of sound judgement.

PRINCIPLE 4

Physical therapists maintain and promote high standards for physical therapy practice, education, and research.

PRINCIPLE 5

Physical therapists seek remuneration for their services that is deserved and responsible.

PRINCIPLE 6

Physical therapist provide accurate information to the consumer about the profession and about those services they provide.

PRINCIPLE 7

Physical therapists accept the responsibility to protect the public and the profession from unethical, incompetent, or illegal acts.

PRINCIPLE 8

Physical therapists participate in efforts to address the health needs of the public.

6. Dress Code

Physical therapy is a professional degree and as such, student enrolled in the program are expected to dress appropriately.

Classroom - Lecture

Students may dress for lectures in casual clothing. Student should refrain from wearing clothes that are excessively worn or tattered. Good judgment should guide the selection of proper dress.

Classroom - Clinical

Dress is to be appropriate for the class activities. Students should be prepared to uncover the body part to be studied. Lockers are available in the PHRC building.

Clinical Setting

Students are to follow the dress policy of the clinical site that you have been assigned. CI's should provide this information to student. On the initial day of your clinical affiliation, students are to dress in a manner that reflects your professional status.

7. Transmitted Diseases

Students enrolled in the Physical Therapy program and faculty should be particularly aware of the potential contamination from infectious agents in the health care environment. Students enrolled in the DPT program must comply with the requirements of level 3 risk category of the *Department of Exercise Science Health and Safety Handbook*.

8. Use of Clinical Classroom

Students have access to the clinical classroom to practice clinical skills and complete assignments when classes are not scheduled. The following rules govern the use of the clinical classroom.

1. Classroom is to be left neat and clean after use. Wipe down the table and stool when you are finished. Then place the stool upside down on the table and raise the table to its highest position.
2. No food or drink in the classroom.
3. Please remove your shoes and any other items that could puncture the leather prior to using the tables.
4. Do not use any equipment that you have not been instructed on. Do not treat individuals other than those enrolled in the program. Do not use modalities on yourself. If you are not sure, don't do it. Be safe!
5. You should only use the clinical classroom with a partner. Do not use alone unless you are just studying or using models.
6. At night please ensure that each partner gets to their car safely.

7. When using the clinical classroom please keep the door closed and locked. Insure that the door is locked when you leave.
8. Do not allow unauthorized individuals into the clinical classroom.
9. Make sure that all equipment is clean, put away and is turned off when you are completed.
10. Do not share the combination to the room with anyone other than those enrolled in the program.
11. When using the classroom always have a cell phone to use in case of an emergency.
12. **IN CASE OF AN EMERGENCY CALL UNIVERSITY POLICE AT 803-777-9111.** (you are in room 309 of the Arnold School of Public Health Research building)

9. Computer Use

Computers and a printer are available for student use in the Public Health Research Center. The following rules govern the use of program computers.

1. Room is to be left neat and clean after use.
2. No food or drink in the room.
3. When using the computer room please keep the door closed and locked. Insure that the door is locked when you leave.
4. Do not allow unauthorized individuals to use the computers.
5. Do not share the combination to the room with anyone other than those enrolled in the program.
6. Do not place any software or personal files on the computer.
7. When done leave the computers on but log out.

4. Academic Responsibilities and Retention

Students enrolled in the DPT program are required to meet the academic standards of the [Graduate School](#) as detailed in the [University Graduate Studies Bulletin](#) and those established by the core faculty of the Physical Therapy Program.

1. Physical Therapy Retention Criteria

Physical Therapy is a clinical profession and therefore it is vital to public safety that

program faculty are assured that students progressing to their clinical experiences and those entering the profession have the skills necessary to practice in a safe and ethical manner consistent with contemporary practice. For this reason, core faculty of the DPT program have established formal academic standards of performance beyond those of the Graduate School and a method by which a faculty members concerns regarding a student's professional behavior and/or academic performance may be reviewed. Students not meeting these standards of performance will not be retained in the program of study. The core faculty makes all retention decisions. Dismissal from the program is a major decision and will usually only be made when other attempts at resolving the problem have failed.

1. Academic Standards

- ◆ Successful completion of the program of study requires that students must receive minimum grade of >B= or 'Pass' on all courses identified with a PHYT delimiter. All other courses in the program of study must be passed with minimum grade of 'C' or 'Pass' (within the rules of the graduate school). ***All other grades (incomplete or withdraw) will be considered as not successfully completed.***
- ◆ Progress through the DPT program is dependent upon successful completion of each course at the time that it is offered in the program of study. Courses are sequenced in the curriculum to build upon the knowledge gained in previous courses. For this reason, students ***not successful in completing a course*** may be restricted from taking additional courses until that coursework is re-mediated. This may result in the student's graduation being delayed. Faculty will review each case individually and notify the student of his/her right to enroll in additional coursework prior to the semester following the deficient course work. Possible decisions that may be made by the faculty include, but are not limited to the following:
 - (1) Continue in the program and re-mediate the deficient course while remaining on track in the program of study.
 - (2) Continue in the program but only be allowed to enroll in classes identified by the core faculty.
 - (3) Suspension from the program with return to the program the next time the deficient course is offered.
 - (4) Dismissal from the program

- ◆ Faculty members establish the grading policies and procedures for individual courses. In establishing these grading policies, faculty members must insure student mastery of all course work. Students not demonstrating mastery in specific aspects of the course may, at the decision of the faculty member be provided remedial work. The opportunities for remedial work may be limited and if available will be delineated in the grading section of the course syllabus. Remedial work may or may not be considered in assigning a final grade by the course instructor.
- ◆ Students are not expected to *exhibit a pattern* of needing remedial work within a course and/or across courses in the program of study. Students needing remedial work on a regular basis should be referred by the student's liaison to the core faculty for consideration. Faculty will review the student's academic performance (usually across two or more semesters) and meet with the student to discuss their progress in the program of study. Faculty may take action to insure a student's clinical competence that may include, but not limited to the following.
- ◆ Re-taking of selected segments of courses or complete courses within the program of study.
 - Completing additional assignments selected to demonstrate clinical competence
 - Development of a plan for a student's continued progress in the program of study.
 - ◆ Unsuccessful completion of any course retaken for re-mediation will automatically result in dismissal of the student from the program.
 - ◆ Students at the conclusion of the fall semester of Year 04 will be required to pass a comprehensive examination. The comprehensive examination for the DPT program will consist of two parts: a multiple-choice section and an essay section. The multiple-choice section will focus upon the student's master of clinical knowledge and practice; the essay section will center on theory and research related to the field of physical therapy. The examination will be a minimum of six hours long and will be written on each of two consecutive days. Students must pass both sections of the comprehensive examination in order to enroll in future clinical experiences. A passing grade of 75 percent must be achieved on the multiple chose section of the examination to pass that section. The members of the core faculty will read the essay section of the examination within 2-3 weeks after its completion. Two-thirds of the

readers must evaluate the performance on the examination as passing. Students not passing the comprehensive examination will be required to re-take sections of the examination not passed. Students are allowed to take the comprehensive examination twice. A second failure will require the student to take an oral exam prepared and graded by the readers of the essay section of their examination. Failure to pass the examination will result in the student not being retained by the program.

- ◆ Students must meet the deadlines established for the research component of the program of study. Those students not meeting these deadlines must be reported by the faculty member responsible for their research to the core faculty for action. As a general rule students are not allowed to fall one semester behind the specified deadlines. Actions taken by the core faculty may include, but are not limit to the following:
 - ◆ Suspension from the program including all course work and clinical experiences until the research deadlines are met.
 - Dismissal from the program of a student not progressing in a timely manner.
 - ◆ Students receive midterm and final evaluations of clinical performance in all clinical courses. In the PHYT 850 course, the CI rates the student using the *PHYT 850 Part-time Clinical Evaluation Checklist* (pp 75-80 of 93 of [Clinical Education Guide](#)). In all other clinical courses the CI rates the student using the *CPI*. Both students and CIs are provided with the *Expected Level of Performance on Each CPI Criterion at End of Clinical Experience* (p 82 of 93 of *Clinical Education Guide*). This provides information regarding the expected final level of performance during the PHYT 851, 852, and 853 internships. The Clinical Grading Policy is outlined in page 83 of *Clinical Education Guide*.

In the Clinical Education Policies and Procedures section of the *Clinical Education Guide* (pp13-16), policies and procedures are detailed for 1) Clinical Problems and 2) Repeat or Extension of a Clinical Course. Clinical problems should ideally be resolved by the student and clinical instructor, but the CCCE and ACCE may also become involved in the attempted resolution of clinical problems not handled successfully at the student/CI level or in specific cases where this is not the appropriate level for resolution of the problem. Actions taken by the ACCE with the support of the core faculty include but are not limited to:

- (1) A clinical course may be extended by the ACCE to allow extra time to gain cognitive, psychomotor, and affective mastery of clinical skills.
- (2) A clinical course may also be repeated but a student may only repeat one clinical course.
- (3) Dismissal from the program

2. Professional Standards

Faculty, staff and other students may notice the action of a student enrolled in the program of physical therapy that may result in behavior that may be considered unethical or professional. In addition, a student may experience academic problems with selected course content. Independent observations of isolated events may not be sufficient to draw attention to a larger potential problem. For this reason, collective observations may assist in the identification of a significant problem and indicate a need for external assistance.

Faculty and staff of the program of physical therapy program have established a policy and procedure for assisting students exhibiting behavioral or academic problems. The objectives of this program are:

- (1) The early identification of students exhibiting behavioral and/or academic problems that will be detrimental to their progression in the academic program or practice as a physical therapist.
- (2) The development of a remedial plan of action designed to assist a student in managing and addressing behavioral or academic problems.
- (3) Although one isolated incident may not rise to the level of dismissal from the program, a **pattern** of unprofessional behavior may result in sufficient cause for dismissal

The following procedures should be followed by faculty, staff or students who observe unprofessional behavior or academic problem on the part of a student enrolled in the physical therapy program.

- (1) An individual who observes a unusual behavior or poor academic performance, physical signs, emotional signs, or inappropriate social interactions should complete the Report Behavioral or Academic Problems Form. This form can be obtained from the office of the Director of the Physical Therapy.
- (2) The completed form should be returned to the office of the Director of Physical Therapy. The confidentiality of the respondent will be assured.

(3) Upon receipt of a completed form the Director of the Physical Therapy Program will schedule an interview with each respondent

(4) The Director of the Physical Therapy Program will maintain a confidential file of all submitted forms. In evaluating the nature of an individual student's problem, the Director will evaluate the number of forms submitted on a student, the nature of the submitted reports and any additional information obtained from the respondent interview.

(5) The Director of the Physical Therapy Program will inform the student of the reported problem and meet with the student and the student will have the right to rebut the observations/assertions.

(6) The Director of the Physical Therapy Program will synthesize all relevant information and submit a report to the core faculty and solicit input regarding the appropriate steps for providing assistance to the involved student.

(7) The Director of the Physical Therapy program will prepare a final report and define the steps to be taken to resolve the problem. A meeting will be held with the involved student to summarize the report and provide an opportunity for assistance. Both the student and Director will sign the report. The report will be placed in the student file and destroyed upon completion of the remedial steps. If the student does not agree with the report or the remedial step he/she may request a hearing with the School of Public Health Grievance Committee.

(8) Students may also be referred to additional support agencies on campus including the Counseling and Human Development Center (Student Health Services) for professional and personal problems and Educational Support Services (Office of Student Development) for problems related to academic skills.

(9) The Director of the Physical Therapy Program will establish a regularly scheduled meeting with the student to monitor progress and provide the faculty with relevant information regarding the student's progress.

3. Appeal Policy

Students who for reasons above are suspended or dismissed from the program of study have a right of appeal. **Appeals of suspensions or dismissals from the program are conducted by the Arnold School of Public Health Grievance Committee.** Grievance procedures are initiated following the procedures outlined in the Policies and Procedures of the Arnold School of Public Health Grievance Committee (available in the Office of the Associate Dean of Academic Affairs of the Arnold School of Public Health). It is important to note that a formal grievance must be submitted to the Arnold School of Public Health Grievance Committee within five (5) working days of the conclusion of any program's procedures.

Students not in compliance with the requirements of the Graduate School should follow the appeal procedures outlined by the Graduate School. Graduate School appeals will be reviewed by the core faculty and a recommendation of the core faculty for action will be forwarded to the Graduate School.

Students not in compliance with the requirements of the Physical Therapy Program must appeal in writing (within two weeks of notification) to the Program Director who will bring the matter to the Core faculty for complete review. In response to an appeal faculty may take no action and leave the current ruling in place or change or modify the current ruling. For reinstatement dismissal a student must demonstrate extenuating circumstances that *significantly contributed* to their performance.

5. Insurance

1. MALPRACTICE INSURANCE

Malpractice insurance in the amount of One Million/Three Million dollars of coverage per incidence/occurrence is required for the duration of each clinical experience and is provided by the University of South Carolina doctoral physical therapy program. Additional personal student professional liability coverage can be obtained through [Healthcare Providers Service Organization \(HPSO\)](#).

2. HEALTH INSURANCE

Many clinical facilities require a statement of health insurance coverage. Students are responsible for this coverage and will be required to provide the statement if assigned to facilities with this requirement. Failure to provide the required statement of health insurance coverage will prevent the student from attending the required clinical education experience and will likely result in delayed graduation. Students may obtain personal health insurance from a variety of sources, for example [Student Insurance](#).

6. Academic Program

1. Program of Study

Students are required to complete the program of study (i.e. sequence of coursework, clinical experiences and research) documented in the program of study in effect at the time of their enrollment. The program of study of each class is available at the program web site under the year of expected graduation. **It is the responsibility of each student to keep track of their progression and insure they are fulfilling the requirements for graduation.** Prior to graduation the office of the Program Director will check to insure that each student approved for graduation has met the program's requirements.

2. Clinical Education Requirements

Students must successfully complete all clinical experiences in sequence. Failure to complete a clinical experience may result in delayed graduation and restrictions placed on academic progression. All clinical experiences must be completed and are regulated

by the policies and procedures outlined in the Clinical Education Guide.

3. Research Project

Students enrolled in a Doctor of Physical Therapy Program in the Department of Exercise Science of the Arnold School of Public Health must submit an approved research project to the office of the Program Director to satisfy part of the requirements for the DPT degree. This document is the ultimate requirement of the academic program because it remains as a permanent record of the independent research and creative effort that led to your being awarded your DPT degree. Guidelines for conducting and preparing this research project can be obtained from the program web site under the link for current students.

Authorship on any professional dissemination of a research project completed to fulfill the requirements of the program of study should include the committee members directing the project.

7. Essential Functions

It is the policy of the Physical Therapy Program at the University of South Carolina to provide *reasonable accommodations* for qualified students with disabilities so they can perform the essential functions required for graduation and the practice of physical therapy. The University of South Carolina Office of Student Disability Services and the Physical Therapy Program make the determination of *reasonable accommodation* jointly. If you need accommodations due to a disability please contact the Office of Student Disability Services at 803-777-6142.

The practice of physical therapy includes the examination, diagnosis, and treatment of people with physical disabilities, movement dysfunction, and pain. Physical therapists must be prepared to conduct in a timely manner a relevant patient examination, evaluate the results of this examination and synthesize these data to establish an accurate diagnosis, prognosis and plan of care, implement an intervention and use the process of re-examination to assess patient outcomes. Physical therapists must also possess the skills necessary to determine when referral of the patient/client to another health care professional is appropriate. Physical therapists must provide evidence that the care that they provide is effective, often through the conduct of clinically-based research.

The Commission on Accreditation of Physical Therapy Education (CAPTE) accredits professional physical therapy programs and requires that graduates of these programs be able to deliver entry-level clinical services. Graduates of entry-level programs are required to possess a broad base of knowledge and skills requisite for the practice of physical therapy. Physical therapists require the *intellectual - communication, behavioral - social, observational, and motor* abilities to meet the standard of practice.

Certain disabilities can interfere with a student's ability to complete the program of study and acquire the essential functions necessary for the practice physical therapy. *Reasonable accommodation* can be made to compensate for some limitations. However, those that interfere

with patient care, safety or require the use of an intermediary may be incompatible with independent professional practice.

The Physical Therapy Program at the University of South Carolina has defined the essential functions of physical therapy as follows.

(1) *Intellectual – Communication Abilities*

Intellectual skills include the abilities to recall and comprehend large amounts of didactic information and to apply this information to the examination, evaluation and management of routine and complex physical therapy problems. Effective communication skills enable the physical therapist to elicit appropriate information from patients and to effectively explain examination and treatment procedures.

Some of the skills an individual must be able to demonstrate include but are not limited to the ability to:

- (2.) Communicate clearly and in a timely manner with patients, physicians, other health professionals, community or professional groups, and colleagues.
- (3.) Report clearly, legibly, and in a timely manner through progress notes in patient charts, reports to physicians, insurance forms, and order forms.
- (4.) Respond to such things as a patient calling from behind a curtain, warning calls from anyone, and machine alarms.
- (5.) Participate in group meetings to deliver and receive information and to respond to questions from a variety of sources.

(2) *Behavioral and Social Attributes*

Students must demonstrate the ability to practice in a professional and ethical manner and possess the emotional stability to practice in a stressful work environment. Compassion, integrity, concern for others, interpersonal skills, cultural competence and motivation are all personal attributes associated with the practice of physical therapy.

Some of the skills an individual must be able to demonstrate include but are not limited to the ability to:

- (1.) Recognize and respond appropriately to individuals of all ages, genders, races, socio-economic, religious, and cultural backgrounds.
- (2.) Cope with the stress of heavy work loads, demanding patients, and life threatening clinical situations.
- (3.) Recognize and respond appropriately to potentially hazardous situations.

(3) *Observational Skills*

Observation is one of the key tools that a physical therapist possesses. To gather data on patient/client condition and to appropriately manipulate machinery are critical to being an effective physical therapist. Some of the skills an individual must be able to demonstrate include but are not limited to the ability to:

(1.) Observe and interpret patient movement, skin condition, safety hazards, and changes in appearance.

(2.) Read and interpret equipment dials, assessment graphs, patient charts, professional literature, and notes from patients, physicians, and other health professionals.

(4) Motor Skills

The practice of physical therapy requires that the practitioner possess the ability to perform basic evaluative and therapeutic procedures that require specific physical skills and stamina (e.g. palpation, transfers, gait training). A therapist must be able to use vision and somatic sensation in the evaluation and treatment of patients. Some of the skills an individual must be able to demonstrate include but are not limited to the ability to:

(1.) Lift, carry, and push patients (150 lbs.) in bed or wheelchairs, heavy equipment, body parts, and patients transferring from bed to chair or mat or be able to instruct others in the activity including proper body mechanics.

(2.) Walk and balance well enough to help patients walk and transfer with or without equipment, and prevent injury to patient and self.

(3.) Palpate anatomical structures and handle injured body parts without causing injury to the subject.

(4.) Exhibit sufficient manual dexterity to manipulate very small equipment, provide support and resistance as needed through complex exercise movements, perform CPR, manipulate dials, and treat acutely ill patients without disturbing sensitive monitoring instruments and lines.

(5.) Provide for the patient's safety and well being in all therapeutic or transporting activities.

8. Informed Consent

Physical therapy students are required to sign an "Informed Consent" document detailing the activities they will experience during laboratory courses throughout the program of study and clinical experiences.

The rights and safety of research participants are protected by the policies and procedures set forth by the [Office of Sponsored Awards Management](#) in [Section SPAR 1.03](#) of the [University of South Carolina Policies and Procedures Manual](#). All research conducted by students

enrolled in the Physical Therapy Program involving human and/or animal subjects is conducted under the guidelines and review of the ***Institutional Review Board***. (IRB Assurance Number FWA 00000404 and Animal Welfare Assurance Number A3049-01).

All researchers (faculty and students) must successfully complete an online ***tutorial*** regarding conducting human research prior to submitting an ***Institutional Review Board Application*** for approval. If research is conducted in a clinical facility not affiliated with the University of South Carolina, students must obtain IRB approval from both the University and that facility prior to data collection.

The University recognizes that laboratory animals are sentient creatures. Their use is a privilege accompanied by an ethical and legal obligation for their humane care and handling. Individuals whose work requires them to use animals in research or instruction must understand and be committed to fulfilling the legal and moral responsibilities of such use. The University of South Carolina endorses the *Principles for the Care and Use of Laboratory Animals of the National Institutes of Health*; has implemented the recommendations of this document, and is complying, and will continue to comply, with the *Animal Welfare Act* and other applicable statutes and regulations concerning the care and use of laboratory animals. Students using laboratory animals for research must complete ***in-service training*** on the care and handling of animals and be granted approval.

9. Program Complaints

There are several methods by which individuals can submit a complaint or comment regarding the Physical Therapy Program at the University of South Carolina its faculty, staff or student

1. Making a Complaint or Comment

For Complaints or Comments Regarding the Program's Accreditation.

The Physical Therapy Program at the University of South Carolina is an accredited program by Commission on Accreditation in Physical Therapy Education (CAPTE) a nationally recognized accrediting agency. As part of the accreditation process, the Physical Therapy Program is encouraged to provide a method by which the general public and academic community can file a formal written complaint regarding any aspect of the program or the conduct of one of its faculty/students.

You can provide the accrediting agency with written testimony regarding the program or file a formal complaint following the procedures detailed at the [Commission on Accreditation in Physical Therapy Education](#)'s web site or by directly contacting: American Physical Therapy Association, Attention: Accreditation Department, 1111 North Fairfax Street, Alexandria, VA 22314-1488; Fax: 703/706-3387; or [e-mail](#).

For Informal Complaints of Comments That You Wish to Bring to our Attention.

Informal comments or complaints regarding the program can be made through the office of the Chairman of the Department of Exercise Science. Individuals wishing to make a

complaint or comment about the program, its faculty or students may do so following these procedures:

- (1.) Detail your complaint in a brief narrative. Identify all the important details and identify those individuals involved.
- (2.) Provide dates when applicable.
- (3.) Provide details regarding your role in the complaint/comment.
- (4.) Give suggestions as to how you believe the complaint/comment should be resolved.
- (5.) Provide steps that you have taken to resolve the issue.
- (6.) Give contact information so that we may get back to you. When possible your identity will be kept confidential.

Complaints and Comments can be mailed to the Chairman, [Department of Exercise Science](#), Arnold School of Public Health, University of South Carolina, Columbia, SC 29208. Fax: 803/777-8422; or [e-mail](#). Once you have submitted your complaint or comment you can expect to be contacted to obtain additional information. You will be notified regarding the action taken in response to your concern.

For Formal Complaints Regarding the Physical Therapy Program.

There are established procedures for filing formal complaints about the program, its faculty and students. If the nature of a concern is major and you desire to file a formal complaint with the University, you are urged to contact the [Office of the Dean](#), Arnold School of Public Health, University of South Carolina 29208 to discuss the nature of your complaint and to determine what procedures should be taken to initiate the formal complaint process.

For Complaints that Fall Outside the Normal Mechanisms Listed Above.

The Program also has a mechanism for individuals to submit complaints about the program outside the normal mechanisms of due process. Informal complaints regarding the program may be submitted at any administrative level; they are documented on a *Documentation of Complaint Form* and submitted to the desired administrative level (i.e. program director, chairman of the Department of Exercise Science, dean of the Arnold School of Public Health).

2. Resolution of the Complaint

Formal complaints or comments forwarded to CAPTE or through the Universities due process procedures will be resolved following the policies and procedures of the agency to which the complaint or comment was submitted.

Informal complaints or comments will be investigated by the Office of the Chairperson of the Department of Exercise Science who will make recommendations to the Core Faculty and Program Director. Individuals submitting a complaint or comment will expect receive a written explanation of the action taken resulting from the submission within

thirty (30) days.