

# DOCTOR OF PHILOSOPHY IN BIOKINESIOLOGY

## *STUDENT HANDBOOK*



Division of Biokinesiology & Physical Therapy

School of Dentistry

University of Southern California

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# What is Biokinesiology?

Biokinesiology is the study of the biological bases of both healthy and disordered human movement. Three fundamental principles underscore the importance of this field of study:

- Human health and quality of life depend on the ability to move skillfully and efficiently.
- Specific biological mechanisms are responsible for skilled and efficient motor output, and an understanding of these mechanisms is essential to developing better methods for treating disorders that affect movement.
- Movement is used by humans to accomplish meaningful goals. This means that a behavioral or action-based perspective is therefore essential to understanding the determinants of both normal and dysfunctional movement.

Biokinesiology is inherently interdisciplinary. To elucidate the causal mechanisms in movement behavior, research programs are designed to analyze movement across different levels of observation. Biokinesiology integrates the study of movement across three broadly defined hierarchical levels. First, movement is analyzed at the molecular, cellular, organ, and systems levels. This is accomplished by using techniques developed in the life sciences to discover the basic structural and physiological mechanisms that account for movement adaptability. These techniques are sometimes invasive and involve animal models and advanced clinical models. Increasingly, advances in imaging techniques allow us to be less invasive and to focus directly on human structure and function. Second, movement itself is studied from the outside using non-invasive or minimally invasive techniques for measuring movement trajectories, the forces that produce movement, and the muscle contractions that produce force. Included in this outside-in perspective are psychophysical and behavioral approaches for describing and analyzing the nature of information processing and the course of learning and adaptability. Lastly, clinical investigations are designed to determine the best ways to measure pathologic movement and to evaluate the efficacy of interventions intended to rehabilitate individuals with disorders that affect their movement.

# **Ph.D. in Biokinesiology**

## **Program Philosophy & Objectives**

Graduates of the PhD program in Biokinesiology are prepared to address important research questions to improve the health and well-being of society. Graduates develop expertise in a focused area of Biokinesiology as well as the requisite technical skills to make meaningful contributions to the field. The PhD in Biokinesiology program prepares graduates to be educators and scientists in Biokinesiology, capable of directing an interdisciplinary research program that is innovative, collaborative, and sustainable.

### **Outcome objectives for the PhD program in Biokinesiology include the following:**

- 1) Proficient knowledge of the biological basis of healthy and disordered human movement.
- 2) A deep understanding of the existing research in a specialized area of Biokinesiology.
- 3) Attainment of strong technical and analytical skills to become an effective researcher in Biokinesiology.
- 4) Demonstrated ability to identify contemporary research questions in Biokinesiology to extend existing knowledge through original research.
- 5) Demonstrated ability to engage in a productive research career in a variety of employment settings.

The curriculum strikes a balance between providing students with a broad exposure to the variety of disciplines within biokinesiology and giving students the advanced skills necessary to excel in a specialized area. Students achieve breadth of knowledge by taking a set of required core courses, and they develop depth by taking elective courses in their areas of concentration. Students complete a dissertation project in which they develop and conduct a unique and significant research investigation with the guidance of a biokinesiology faculty member as research advisor.

# Commitment to Diversity, Equity & Inclusion

The Division is committed to diversity, equity, inclusion, and anti-racism in our teaching policies and practices. We are health care providers and researchers who want to provide equitable care to a diverse population and in order to do so we must include all of the voices of that population. The Diversity, Anti-Racism, Inclusion, and Community Engagement (DARIC) Council guides the Division's strategic priority to foster diversity in the recruitment and retention of our students, staff, and faculty; provide an inclusive, anti-racist environment where all members of the community are valued and feel welcomed; and to promote population health equity.

Knowing that we are limited by our own cultural lenses, life experiences, and institutional blind spots, there will be instances when we fall short of our goals of creating a welcoming, safe, and inclusive environment. When we do fall short, we invite students to bring to our attention instances of implicit bias, microaggressions, or cultural insensitivity. We encourage students to bring these concerns directly to the offending Division faculty and/or staff, however, we recognize that some students may prefer other methods to communicate these concerns. In those cases, these instances can be brought to the DARIC Council, or reported on the DARIC Bias Reporting Form with the option of remaining anonymous. This form may be found on the Division's Diversity and Anti-Racism webpage: <https://pt.usc.edu/bias-incident-reporting-form/>.

# Graduate School Requirements & Policies for the PhD Degree

## Unit Requirements

A minimum of 60 units of course work beyond the baccalaureate is required for the Ph.D. degree, including research courses and four units of 794ab Doctoral Dissertation. No more than 8 units of 794 may be received or applied toward the degree. A minimum of 36 units of course work beyond the first graduate degree, exclusive of 794 Doctoral Dissertation, is required for doctoral degree students admitted with Advanced Standing. Additional course work may be required if deemed necessary by the student's faculty.

## Residence

Residence is a period of intensive study completed at USC. For the Ph.D. degree, a minimum of 24 units applicable toward the degree, exclusive of 794 Doctoral Dissertation, must be completed on the University Park and/or Health Sciences Campuses. Internships, fieldwork and other off-campus experiences do not count toward residency. It is not intended that the Ph.D. degree be conferred as a certificate of residence, however faithful or extended, or as a certificate of the satisfaction of unit requirements, which are to be regarded as largely preliminary. It has been found that the scholastic requirements for the degree cannot be completed in less than the equivalent of three full years of work devoted wholly to graduate study and research with appropriate facilities and under university supervision.

## Exception to Graduate School Policy

Exceptions to certain policies and procedures governing Graduate School degree programs will be considered upon the submission of a specific request supported by adequate reasons, information and documentation, if needed. The signatures and recommendation of the faculty adviser or committee chair, the department chair, and, in some cases, the dean of the degree program, are required. Requests must be initiated and submitted on behalf of the student by the department's or program's staff adviser. After training on the Graduate School's online request system, advisers may access the necessary forms through the Graduate School's Website.

## Academic Warning and Dismissal

Faculty advisers, departments and programs take factors other than satisfactory grades and adequate GPAs into consideration in determining a student's qualifications for an advanced degree. A student's overall academic performance, specific skills and aptitudes, and faculty evaluations will be considered in departmental or program decisions regarding a student's continuation in a master's or doctoral degree program. Satisfactory progress toward an advanced degree as determined by the faculty is required at all times. Students who fail to make satisfactory progress, will be informed by their department chair, program director or school dean. The faculty has the right to recommend at any time after written warning that a student be dismissed from a graduate program for academic reasons or that a student be denied readmission. Written warning letters must include specific benchmarks describing how the student can, within a reasonable time frame, succeed in the program.

### Advisement and Program of Study

Academic advisement of entering graduate students will be provided by a designated faculty member in the student's home department. Ideally, during the first semester of graduate enrollment a formal program of study should be developed and agreed upon in writing. This academic plan should include: (1) the sequence of required and elective courses, with a diversity of faculty instruction and a reasonable balance between course work and directed research appropriate for the degree; (2) evaluation of available transfer credit for application toward the degree; and (3) the schedule and procedures for departmental evaluation of the student. The program of study should be on file in the student's department and may be modified in keeping with the student's progress toward the degree objective. This should become the responsibility of the student's qualifying exam committee when it has been established.

### Screening Procedure

A screening examination or other procedure designated by the department or program is to be administered before the student has taken more than 24 units (including research courses). Passing this procedure is prerequisite to continuation in the doctoral program. Students who fail the screening procedure will be advised that they are not recommended to continue in the Ph.D. program and that any additional work may not be counted toward the degree. Failure to undertake the screening procedure before completion of 24 units of course work may jeopardize additional units. Ideally, a faculty member will be appointed to serve as the student's administrative adviser until the student establishes an approved qualifying exam committee.

### Appointment of the Qualifying Exam Committee

The Qualifying exam committee is responsible for supervising the student's preparation for the exam and for the fair and timely administration and evaluation of the written and oral parts of the examination. The Appointment of Qualifying Exam Committee form, available on the Graduate School Website, is used to establish the qualifying exam committee. The form requires the signature of each member of the committee, the department chair or program director, and the dean or Dean's designate. The completed form is filed in the student's home department.

The qualifying exam committee is composed of exactly five members. The committee chair and at least two additional members must have their primary appointment in the student's program.

Because the goal of USC PhD programs is to create scholars who will shape their fields in a wide range of settings, the university encourages PhD students to take advantage of the full array of faculty expertise available at USC. This includes the expertise of tenured, tenure track, research, teaching, practitioner, and clinical faculty. A USC faculty member from outside the student's home program is called an "outside member." The committee may also include a faculty member from an institution other than USC, called an "external member."

Any faculty member – external, outside, or from the student's home program – who serves on PhD dissertation and qualifying exam committees must have a professional profile that demonstrates academic impact on the field in significant, measurable ways. The judgment about these qualifications will be made on the basis of hard evidence: for example, peer-reviewed publications in major journals and presses, grant funding, and exceptionally influential practice

in a given field, taking into account the person's total career, current stage of career and any changes in performance in a more recent period.

Faculty who are evaluated on the basis of criteria other than those noted above will not normally be considered appropriate members of PhD and qualifying exam committees, except by explicit permission of the vice provost for graduate programs acting on the advice of the dean of the school. For faculty within the student's home program and external faculty members, qualification to serve will be judged by the dean of the school that houses the student's PhD program. The CV of the external member must be uploaded along with the Appointment of Committee form to Thesis Center and will become part of the official record.

For outside faculty – faculty outside the student's program but internal to USC – the judgment of qualification to serve will be made by the dean of the school of the outside faculty member's primary appointment.

#### Changes in Qualifying Exam Committee

The Appointment of Change of Committee form, which can be obtained from the Graduate School Website, must be completed whenever a change is made in a qualifying exam committee. All such changes *must be made in advance* of the qualifying examinations. Informal substitutions for either the written or oral parts of the qualifying examination are not permitted. Changes in a qualifying exam committee are not permitted between the written and oral portions of the examination. The examinations must be scheduled at times when it is possible for all members of the committee, including the outside member, to participate. Changes made without the prior approval of the dean of the degree program are not recognized and may result in the invalidation of the examination.

A student may not change committee members after failing the qualifying examination the first time. The student must be reexamined by the same faculty on the same subject matter. If a faculty member is unable to serve on the committee (for example, due to serious illness, retirement, or transfer to another institution), the dean of the degree program must be notified in writing in advance of the rescheduled exam in order to approve the change. The faculty replacement must be approved by the dean of the degree program and the student must file a change of committee form well in advance of the exam.

#### Qualifying Examination

The examination qualifying a student for candidacy for the PhD degree is designed to test the student's fitness to undertake independent research. It is comprehensive in nature and includes both written and oral parts.

Prior to taking the qualifying examination, the student must have met all of the university's and program's requirements for the PhD degree, except the dissertation and successful qualifying exam. The student must have a GPA of at least 3.0 on all USC course work available for graduate credit and the approval of his or her qualifying exam committee to proceed to the exam. Students with a master's degree in the same or similar field may be approved to take the qualifying examination after the completion of 12 units and successful passage through the screening process. The GPA and qualifying exam committee approval requirements are the same as for students without a prior master's degree in the field of study.



The oral portion of the examination must be completed within 60 days of the submission of the completed written portion to the qualifying exam committee. If the student's written examination is satisfactory, the student may proceed to the oral portion of the exam. If additional material is to be covered in the oral portion, the student should be notified of the content expectations in advance. The oral examination is also administered on campus. Remote participation of a committee member requires approval from the Vice Provost for Graduate Programs in advance of the exam date. If the oral exam is delayed beyond the 60-day limit, the student will need to retake the written exam unless an exception is approved by the Vice Provost for Graduate Programs.

There are three possible results of a qualifying exam:

- Pass, and proceed to candidacy based on a positive vote by members of the committee.
- Fail, with the option to retake either specific sections of the exam or the whole exam, at the discretion of the committee. The student may not be required to repeat parts of the qualifying examination that were passed on the first administration. The retaking of a failed qualifying examination or any portion of a qualifying examination must take place between one and six months from the date of the first examination. If not otherwise enrolled, the student must be enrolled in [GRSC 800](#) in the term in which any portion of the exam is repeated.
- Fail, with the result of dismissal from the program.

If the committee concludes that the written portion of the exam is so weak that the oral portion cannot counterbalance the poor performance, the student does not proceed to the oral and the exam is failed. The committee may provide the option of a retake, but is not required to do so. If the committee decides that a retake is not warranted, the student is dismissed from the program.

A student who fails the qualifying exam a second time is automatically dismissed from the program.

#### *Report on the Ph.D. Qualifying Exam*

At the conclusion of the qualifying exam, each member of the committee is asked to certify on the Report on the Ph.D. Qualifying Examination that: (1) the exam was appropriately rigorous; (2) the student's performance on the exam was at the doctoral level; and (3) the entire qualifying examination process was fair and in keeping with USC's academic and ethical standards. The Report on the Ph.D. Qualifying Examination is available to graduate advisers on the Graduate School Website in myGradSchool.

#### *Advancement to Candidacy*

Graduate students are officially advanced to candidacy for the PhD degree when they have completed the residency requirement and passed the written and oral portions of the PhD qualifying examination upon the favorable recommendation of the qualifying exam committee to the Graduate School.

#### *Application for the Ph.D.*

After being advanced to candidacy, students must contact their academic department to initiate an online degree check that is transmitted to the Degree Progress Department. Degree Progress counselors prepare a Degree Audit Report (STARS Report) for each student listing any remaining requirements. The requirements will not be checked or the degree conferred if the student has not applied.

### *Dissertation Committee*

The dissertation committee is appointed as soon as possible after the examination has been passed and a dissertation topic approved. The committee should be appointed at least one month before the dissertation defense. The Appointment or Change of Qualifying Exam or Dissertation Committee form, available on the Graduate School Website, is used to establish the dissertation committee. The form requires the signatures of each member of the committee, the department chair or program director, and dean or dean's designate. The completed form is filed in the student's home department or program, and a signed copy provided to the student.

The dissertation committee is composed of at least three and no more than five members. The committee chair and at least one additional member must have an appointment in the student's program.

Because the goal of USC PhD programs is to create scholars who will shape their fields in a wide range of settings, the university encourages PhD students to take advantage of the full array of faculty expertise available at USC. This includes the expertise of tenured, tenure track, research, teaching, practitioner, and clinical faculty. A USC faculty member from outside the student's home program is called an "outside member." The committee may also include a faculty member from an institution other than USC, called an "external member."

Any faculty member – external, outside, or from the student's home program – who serves on PhD dissertation and qualifying exam committees must have a professional profile that demonstrates academic impact on the field in significant, measurable ways. The judgment about these qualifications will be made on the basis of hard evidence: for example, peer-reviewed publications in major journals and presses, grant funding, and exceptionally influential practice in a given field, taking into account the person's total career, current stage of career, and any changes in performance in a more recent period.

Faculty who are evaluated on the basis of criteria other than those noted above will not normally be considered appropriate members of PhD and qualifying exam committees, except by explicit permission of the vice provost for graduate programs acting on the advice of the dean of the school.

### *Final Approval of the Dissertation*

After the dissertation defense has been completed and after the committee determines that no further changes are required of the dissertation manuscript, each member electronically certifies on the Approval to Submit Defended and Final Copy of Doctoral Dissertation that: (1) the defense was appropriately rigorous; (2) the student's dissertation makes an original and substantial contribution to its field of study; and (3) the defense process was fair and in keeping with USC's academic and ethical standards. This includes adherence to departmental formatting requirements. No changes can be made to the manuscript's content after the Approval to Submit

form is complete. The Approval to Submit form is electronically available through Thesis Center, the Graduate School's online thesis and dissertation processing system. The committee must unanimously agree in order for the student to pass the defense.

### Doctoral Dissertation

A dissertation is an original contribution to current knowledge in the field and a demonstration that the PhD candidate has achieved sufficient mastery in the field to pursue independent research and scholarship. A dissertation represents the individual candidate's research and writing. In fields where collaborative research has become the norm, the candidate is the sole author of the dissertation and specifies his or her contribution to the research and also delineates colleagues' contributions.

Dissertations are expected to be written in English. Exceptions require the approval of the vice provost for graduate programs or her nominee prior to beginning the work and will be granted only when there is strong scholarly justification.

The student is expected to be enrolled in 794 Doctoral Dissertation each semester, except summer sessions, after admission to candidacy until all degree requirements are completed. Registration for 794 for the two semesters (excluding summer sessions) immediately following admission to candidacy is the minimum requirement entitling the candidate to dissertation supervision by the dissertation committee. Enrollment in 794 prior to admission to candidacy is not permitted and such registration is invalid. If the dissertation is not completed and accepted within two semesters the candidate must continue to register for 794 each semester thereafter until the dissertation has been approved and the approval of the PhD dissertation has been signed by the dissertation committee. Students are expected to complete and defend their dissertation before they have enrolled in no more than five semesters of 794. Students may enroll in 794 during one summer session but may not register for more than two units of 794 during a given semester; individual exceptions require the approval of the dean of the degree program. No more than eight units of credit in 794 may be received, regardless of the number of semesters in which the candidate may be required to enroll. Department or program approval is required for registration in 794.

### Leave of Absence

A candidate who finds it necessary to be excused from registration in 794 for a semester must request a leave of absence by petition to the dean of the program of study prior to the beginning of the semester. See Leave of Absence in the [Financial Aid for Graduate Students](#) section. Endorsements from the dissertation committee chair and department chair or program director are required. During a leave of absence the candidate will not be entitled to assistance from the dissertation committee or to the use of university facilities. Considerations for approving a leave of absence include the student's progress to date in meeting the time schedules for the completion of degree requirements.

PhD students with serious medical conditions should consult the [Health Leave of Absence policy](#), which is not the same as a general leave of absence. PhD students on an approved Health Leave will enroll in GRSC 803 to ensure continued access to the stipend and health insurance.

PhD students considering Parental Leave should consult the USC Graduate School. PhD students on an approved Parental Leave will enroll in GRSC 804 to ensure continued access to the stipend and health insurance.

### *Defense of the Dissertation*

After passing all required courses and the qualifying examination, and after meeting all other requirements, the candidate must write and defend the dissertation. The doctoral dissertation must be an original contribution to scholarship or scientific knowledge and must exemplify the high degree of scholarly advancement and power of investigation demanded by the university for final recommendation to the doctorate. The dissertation defense is the culminating activity in the assessment of whether this standard has been met.

While the oral examination is open to the general university community, only the members of the dissertation committee have the authority to recommend acceptance of the dissertation. During the oral defense, all members of the dissertation committee must be present and must give a judgment on the student's defense. The recommendation must be unanimous.

If the defense is satisfactory, the committee then signs the electronic Approval to Submit Defended and Final Copy of Dissertation form. If additional work is required, the electronic form must be signed only on full completion. Departments and programs differ concerning the time of the defense of the dissertation. The student's dissertation committee is responsible for the content, adherence to departmental formatting requirements, and bibliographical consistency of the dissertation.

### **Transfer Credit**

The Degree Progress Department in the Office of Academic Records and Registrar determines whether course work taken elsewhere is available for transfer credit. Faculty of the student's degree program determine whether such credit is applicable toward a specific graduate degree, subject to approval by the dean of the degree-conferring unit. The faculty's decision should be made no later than the end of the first year in a master's program or the second year in a doctoral program.

Credit will only be allowed for courses (1) from an accredited graduate school, (2) of a quality of at least 3.0 on a 4.0 grading scale, (3) constituting a fair and reasonable equivalent to current USC course work at the graduate level and (4) logically fitting into the program for the degree. Transfer course work is applied as credit (CR) toward the degree and is not included in the calculation of a minimum grade point average for graduation.

Graduate transfer credit will not be granted for life experience, credit by examination, extension courses not accepted toward a degree by the offering institution, correspondence courses or thesis supervision. Graduate transfer credit will not be granted for course work taken elsewhere after a student has been admitted and enrolled at USC unless the student receives prior written approval from the department. Students may not take courses elsewhere as a substitute for courses in which they have received grades which fail to meet departmental or university requirements.

Transfer work must have been completed within seven years of admission to a USC master's degree program (or 10 years for a doctoral program) to be applied toward that degree. Departments have the option of reevaluating transfer work when a student is readmitted to a USC graduate degree program.

The faculty of a degree program may establish limits on the number of transfer credits stricter than those of the university, which follow:

(1) The maximum number of transfer credits which may be applied toward a master's degree, subject to departmental approval is: four units in degree programs requiring 24-32 units; eight units in programs requiring 33-40 units; 12 units in programs requiring 41 or more units. Except in formally designated dual degree programs, the same limits apply if a student wishes to transfer credits from any advanced degree previously completed at USC toward a master's degree.

(2) A maximum of 30 units of transfer credit may be applied toward a doctoral degree.

(3) A maximum of six units of transfer credit may be applied toward a doctoral degree with Advanced Standing. Admission with Advanced Standing is based upon a completed graduate degree. The only course work available for transfer credit is course work taken after completion of that degree.

(4) A maximum of four units of transfer credit may be applied toward an approved dual degree program.

The University Committee on Curriculum (UCOC) must approve policies and procedures for considering individual exceptions within any specific program of study. Program exceptions to the transfer of course work policies require the approval of the UCOC and are listed in the departmental sections of this catalogue. Departments establishing lower maximum limits may waive their own policy (within the university's limits) by approval of the dean of the degree conferring unit.

#### *Application of Previous USC Course Work to a Current Degree*

USC course work taken prior to matriculation to a current USC degree program must have been completed within seven years of admission or readmission to a master's degree program (or 10 years for a doctoral program) to be applied toward that degree. Exceptions require approval from the Associate Vice Provost for Graduate Programs.

#### *Credit Evaluation*

The purpose of the evaluation is to verify all previously earned degrees and may list graduate course work completed at other institutions which is available for consideration toward the USC degree. Students who intend to apply transfer course work toward a USC degree program can request a comprehensive credit evaluation through the Degree Progress Department. Only courses with a grade of B (3.0) and above are available for transfer. These courses do not apply toward a specific USC degree unless approved by the student's major department and school.

## **Leave of Absence Policy**

Departments are permitted to grant Leaves of Absence without Graduate School approval for one semester at a time, for up to four semesters total for domestic students. International students must receive Office of International Services (OIS) approval for each semester, in addition to the department's approval. After four semesters, additional Graduate School approval is required.

### ***Health Leave of Absence***

The purpose of the Voluntary Health Leave of Absence (VHLA) is to provide students time away from school for treatment of a physical or mental health condition that impairs a student's ability to function safely and successfully as a member of our community. The authority to grant a VHLA and permission to return from a VHLA resides with the university's Health Leave Coordinator (HLC) in consultation with the student's academic unit, treatment providers and relevant campus partners, as needed. The Health Leave Coordinator aims to support the student through the process, providing information about guidance about the tasks associated with a health leave and helping the student to develop and implement a plan that will facilitate their recovery and return to school. A student may initiate a request for a VHLA by contacting the Health Leave office, at 213-740-0411.

# Division Requirements for the Ph.D. in Biokinesiology

## Important facts

- 1) 60 units are required for the Ph.D. degree.
- 2) Students must maintain at least a 3.0 GPA (grades less than “C” are considered failing)
- 3) If transferring from USC BKN MS program, 36 units beyond that obtained as part of the MS degree is required.
- 4) To be eligible as a TA or RA you must be enrolled in at least 6 units or 2 units of BKN 794.
- 5) All Ph.D. students are required to attend the weekly graduate student seminar.

## Required Courses

BKN 550*	Neurobehavioral basis of movement (4 units)
BKN 551*	Musculoskeletal and Biomechanical basis of movement (4 units)
BKN 552*	Physiological basis of voluntary movement (4 units)
BKN 553	Experimental methods for the analysis of human movement (4 units)
BKN 790	Research (1-12 units; 12 units maximum)
BKN 794abcdz	Doctoral dissertation (2-2-2-2-0 units)
2 Semesters of Graduate Level Statistics	
1 Ethics course	

**\*Students must take at least 2 out of 3 core content courses (BKN 550, BKN 551, BKN 552).**

## Screening Procedure

See Qualifying Exam document below

- 1) Must be taken before the completion of 24 units.
- 2) Offered twice a year (July and November).
- 3) Dossiers are to be submitted 6 weeks in advance.

## Qualifying Exam

See Qualifying Exam document below

## Yearly progress report

All Ph.D. students must complete a self assessment of progress following each year of study. Similarly, faculty advisors must complete a student progress report following each year of study. These materials are due to the Director of the BKN program no later than June 15<sup>th</sup>.

## **Division Policy Regarding the Transfer or Substitution of Coursework**

The transfer of units into the Biokinesiology program requires the following approvals

- 1) Advisor approval
- 2) Approval by the Graduate School
- 3) Approval from the Director of the Biokinesiology program

Similarly, substituting a previously taken course for a required course within the Biokinesology Program requires the following approvals

- 1) Advisor approval
- 2) Approval of the course director
- 3) Approval of the Director of the Biokinesiology program

In order to substitute a course for a required course, the student must provide evidence (i.e. texts, syllabus, etc.) that the content of the course to be substituted is equivalent in content to the course offered within the division.



# Teaching and Research Assistantships

The Division guarantees a Teaching or Research Assistantship for students enrolled in the PhD program. In return, students are expected to commit 100% of their time and effort towards completion of their degree. Outside employment is not permitted. Assistantships are for 12 months and provide tuition support (up to 12 units per semester), health and dental insurance, and a monthly stipend. The monthly stipend is \$3,062 (\$36,750/year) for students who have not advanced to candidacy, and increases to \$3,377 a month (\$40,530/year) for students who have advanced to candidacy (i.e. following completion of the qualifying examination). The Assistantship will be provided by the Division from the beginning of the Academic year that the student begins the PhD program up to a maximum of 5 academic years. Students who do not graduate within 5 years, will be responsible for their own financial support.

The Division is committed to the academic progress of its PhD students and expects that their program of study will be completed within 5 years. To facilitate degree completion, Research Assistantships *without* any teaching responsibilities will be considered for students in their final semester (i.e. the semester in which the student defends their dissertation). Please note that the semester in which a student receives a Research Assistantship *without* teaching responsibilities will be the last semester of Division support. Requests for a Division Research Assistantship *without* teaching responsibilities for the upcoming academic year (Fall or Spring semester) should be made to the Director of the Biokinesiology program no later than **June 1**.

## Special Responsibilities of Teaching Assistants

The academic year *starts 1 week prior* to the first day that the Fall Semester starts. During this week, all funded PhD students are expected to be available to assist in activities related to preparation for the Fall semester. In addition, *all Division Teaching Assistants are expected to attend a mandatory Teaching Assistantship Division orientation the week prior to the start of classes.*

All responsibilities of teaching assistants are carried out under the supervision of the Course Director for the courses assigned by the Director of the Doctor of Physical Therapy program. Teaching assistants' duties may include the following: reading course texts and materials, assisting during lectures, leading discussion sections or lab meetings, holding office hours each week, responding to student concerns, grading course assignments and exams, leading and monitoring lab exercises, participating in regular meetings with supervising faculty and other Teaching Assistants, designing and leading review sessions, serving as a liaison between the instructor and students, upholding the University's policy on academic integrity, and assisting with the management of the course details.

International students who are admitted to the Ph.D. program must pass an English proficiency exam before they can be given a Teaching Assistantship. The language examination is administered by American Language Institute (ALI) the summer prior to the first semester of classes (typically mid August). Failure to pass the English proficiency exam will result in a loss of funding from the division. Funding will be restored once the student has met all language requirements.

## **Special Responsibilities of Research Assistants**

Division Ph.D. students typically begin with Teaching Assistantships within the Professional Doctor of Physical Therapy program. After 2-3 years, students may transition to Research Assistantships if funding is available. Research Assistants are paid on the same scale and receive identical benefits as Teaching Assistantships.

At a minimum, a Research Assistantship should be considered a 20 hour per week job. Students usually opt to put in more time, however, depending on the relationship between Research Assistantship duties and the dissertation project, or the likelihood of co-authoring resulting publications. The relation between the Research Assistantship project and the dissertation project will vary depending on the faculty member involved and other circumstances. In some cases, the two projects are the same and you will in effect be paid for doing your dissertation research. In other cases, efforts are made to keep the projects distinctly different. Good arguments can be made for either approach.

Whereas Teaching Assistantships are funded by departments, Research Assistantships typically are funded by research grants. As the name implies, Research Assistants do research, usually directed at the Specific Aims of a grant. The time required is often more than that for a Teaching Assistantship, but this is usually not a burden because the work should be directly relevant to your research training. Research Assistants should assume responsibility for making proper use of the intellectual, instructional and physical environment in which the student is conducting research. The nature of some research projects may require that the research assistant be available during holiday periods or semester break. To minimize the possibility of misunderstanding, the student should inquire about this possibility before finalizing the appointment.

**Further details regarding the rights and responsibilities of Teaching and Research Assistants are available in the USC Graduate Assistant Handbook at:**

[http://graduateschool.usc.edu/assets/doc/GA\\_Handbook.pdf](http://graduateschool.usc.edu/assets/doc/GA_Handbook.pdf)

## **Suggested Time Frame for the PhD Program**

The following time frame should be used as a guide for completion of the PhD program in a timely manner. Your progress in the PhD program will be evaluated based on the achievement of the yearly goals outlined below. Your advisor will assist you in organizing your overall plan of study.

- Year 1:            Required and/or elective coursework in Biokinesiology  
                      Laboratory experience/exposure  
                      Identification of a research topic with advisor approval
- Year 2:            Required and/or elective coursework in Biokinesiology  
                      Screening Examination (Semester 3)  
                      Selection of Qualifying exam committee  
                      Collection of pilot data to support proposed dissertation project
- Year 3:            Qualifying Examination Parts A & B (Semester 5)  
                      Data collection
- Year 4:            Data collection  
                      Write and defend dissertation

## **Ph.D. Screening Procedure**

### **Division of Biokinesiology and Physical Therapy**

The purpose of the Ph.D. Screening is to assess and determine the progress of the BKN Ph.D. student since admission and whether that progress is sufficient to continue in the Ph.D. Program. The Screening Committee will be chaired by the Director of the Biokinesiology Program and composed of all BKN faculty members. The Ph.D. Screening Procedure will be administered every fall semester or as needed. At least two-thirds of the BKN faculty must be present to form a quorum for voting purposes.

Students will be scheduled for the Screening Procedure by the Director of the BKN Program before the student has completed more than 24 units. **It will be the responsibility of the student to ensure that all required information is given to the Director of Student Affairs at least 4 weeks prior to the screening procedure.** The student must attend the Screening and answer any questions posed by the BKN Faculty. The student will then be required to leave the meeting prior to the Faculty vote.

#### **Required material for Screening Dossier**

**Please compile the documents listed below into a single .pdf file in the following order:**

1. A current CV
2. A complete transcript covering all courses taken since admission into the BKN program and any previous coursework if the units will be applied toward the Ph.D. degree.
3. The cumulative GPA since enrollment in the M.S. and/or Ph.D. BKN program.
4. A copy of at least one manuscript written independently by the student since admission into the Ph.D. program. The manuscript can consist of a paper written for a class, a readings paper, or any other related document.
5. All TA evaluations (*not course evaluations!*) since enrollment in the M.S. and/or Ph.D. BKN program or equivalent documentation.
6. A written statement by the student summarizing his/her research progress since admission into the Ph.D. program and timeline for developing the dissertation proposal.
7. A working draft of a specific aims page.
8. A written statement by the student's advisor summarizing the student's progress as an independent researcher.
9. Signed agreement to adhere to the ethics essential in conducting research and publishing scientific literature (see page 41 of this handbook)

## **Factors Considered for Passing the Screening Procedure**

1. Cumulative GPA is 3.3 or greater.
2. GPA for BKN coursework is 3.3 or greater.
3. Ability to write effectively as evidenced in one scholarly manuscript (or suitable equivalent, as determined by the faculty advisor) authored by the student.
4. Adequate progress toward development of the dissertation proposal as evidenced in a written statement provided by the student. The statement should also include evidence of progress in any area of weakness identified during previous semester reviews.
5. Adequate progress toward development of the dissertation proposal as evidenced in a written statement provided by at least one faculty member (usually the faculty advisor).
6. Satisfactory performance in teaching documented by TA reviews or an equivalent.
7. Signed agreement to adhere to the ethics essential in conducting research and publishing scientific literature (see page 41 of the handbook).
8. All performance deficiencies identified during the Screening are viewed as minor by the majority of faculty.

A majority vote of the faculty determines the outcome of the Screening Procedure (pass or fail). Faculty having little or no contact with the student may elect to abstain without impacting the final decision.

**Passing the Screening Procedure is a prerequisite for continuation in the Ph.D. program. Students who fail the screening procedure will be advised that they are not approved to continue in the Ph.D. program and that any additional work may not be counted toward the degree.**

# Ph.D . Qualifying Examination Guidelines

## Division of Biokinesiology and Physical Therapy

Successful completion of the Qualifying Examination admits a student to official candidacy for the Ph.D. degree. The overriding principles that govern the Qualifying Examination procedures are that 1) students are aware of the breadth and depth of their chosen area of research, 2) the qualifying exam committee plays an important role in the mentoring of the Ph.D. student, and 3) the proposed dissertation represents original investigation with appropriate scientific rigor. The steps leading to successful completion of the Qualifying Examination are as follows:

1. Select an area of research
2. Choose a Qualifying Exam committee
3. Work with your Qualifying Exam committee in developing your dissertation proposal
4. Pass the Qualifying written examination (Part A)
5. Pass Qualifying examination (Part B) which includes the written proposal and oral defense.

A detailed description of the Qualifying examination procedure follows:

### **A. Choosing a Qualifying Exam Committee:**

The Qualifying exam committee is comprised of at least 5 faculty members. The purpose of the Qualifying exam committee is to mentor the student in their chosen area of study and assist in the development/completion of the dissertation. In addition, the Qualifying exam committee will conduct the Qualifying examination. The principal advisor serves as the chair of the Qualifying exam committee. *See pages 7-8 of this handbook for details regarding the composition of the Qualifying exam committee.* The appointment of external, outside or non-PhD faculty members to the Qualifying exam committee requires division approval. The chair of the Qualifying exam committee should initiate the approval process by submitting the candidate's CV and a one paragraph overview of the candidate's expertise to the Chair of the Biokinesiology program.

Choosing a Qualifying exam committee is an important matter. When thinking of potential committee members, keep in mind that each member should be able to offer content expertise that will provide you with the breadth and depth of your chosen area of research. This will be critical to your future development as an independent researcher. Ultimately, you will develop a close relationship with your Qualifying exam committee that will be of mutual benefit not only during your student days but also throughout your career. Consult with your advisor regarding choice of committee members.

The Qualifying exam committee should be established at least 2 semesters prior to beginning the Qualifying examination. The *Appointment of Committee form*, obtained from the Division's Student Services Assistant (Sadi Metz) is required to formally establish your committee. This form should be filed with the Student Affairs Coordinator the semester prior to beginning the Qualifying examination. In addition, all committee members should read and sign the *Responsibilities of Doctoral Committees form* found on page 30 of this handbook. This document outlines the expectations of doctoral

committee members as delineated by the Biokinesiology faculty. Copies of the signed form should remain with the committee member and the primary advisor.

Students should consult extensively with each committee member during the development of the dissertation proposal. Regularly scheduled meetings are highly encouraged. Ideally, each member of the Qualifying exam committee will provide the student with feedback throughout the process. In addition, members of the Qualifying exam committee may recommend readings and/or coursework that will be of assistance in developing content expertise in certain areas. Keep in mind that getting to know the expectations of your committee is important as they will be administering the written and oral components of the Qualifying examination!

## **B. Qualifying Examination: Part A**

To sit for Part A of the Qualifying Examination, students must have completed a minimum of 24 units and have at least a 3.0 GPA. It is highly recommended that you complete Part A of the qualifying examination before the start of the 7<sup>th</sup> semester of graduate work. Ideally, Part A only should be taken after working with your Qualifying exam committee members for at least a semester. You must file the *Appointment of Qualifying Exam Committee Form* with the Division's Student Affairs Coordinator at least 30 days prior to taking Part A.

Part A will be an open book/open note exam and will consist of 4 questions, one from each of the Qualifying exam committee members (excluding the primary advisor). If there are more than 5 members on a committee, the advisor will choose which of the 4 will write questions. Committee members will submit their questions to the primary advisor who will review them to ensure appropriate breadth and depth of the exam. The faculty advisor will administer the examination.

You will be given one question at a time, and will have 9 hours to complete your response to each question. The 4 questions will be administered over the course of 5 days (1 question per day with a 1 day break). Any reference or source material can be used to complete the exam. You can ask for clarification from the faculty member who submitted the question, but may not discuss it with anyone else. Specific instructions (i.e. recommended length of answer) may be provided with each question.

Each member of the Qualifying exam committee will grade his/her question on a 1.0-5.0 scale using 0.5 steps if necessary (1.0=poor and 5.0=exceptional). An average score of 3.3 or above will constitute a "Pass". A score below 3.0 will be considered a "Fail". The outcome of an exam where the average score falls between 3.0 and 3.3, or when 2 or more questions are graded below 3.0, will be determined by the full committee. Two or more negative votes of the committee will result in failure of the exam. A retake may be allowed at the discretion of the committee (see below for details).

## **C. Qualifying Examination: Part B**

Upon passing Part A, you will complete Part B of the Qualifying Examination. **Part B must be completed within 60 days of completing Part A.** Postponement of Part B must have approval of the Associate Dean of the Division. Part B will consist of the written proposal as well as an oral defense of the proposal. The proposal will consist of a

proposed plan for the student's dissertation project. The final draft must be given to the committee **no later than 2 weeks before the oral exam**. The proposal should follow the format outlined below.

The oral exam will be open to committee members only, and will consist of a critical defense of the written proposal. Students should expect questions that relate to any area relevant to the proposal. The oral exam also may be used to assess whether weaknesses that were identified in the written exam have been corrected. You should prepare a presentation of 30-45 min in length and leave the rest of the time for questions and discussion (maximum time is 3 hours). During the oral examination, all members of the qualifying exam committee must be present and must render a judgment on the student's qualifying examination.

The oral exam should be scheduled with the Qualifying exam committee. Remember that scheduling a time when all members of your Qualifying exam Committee will be present will require that you contact each member well in advance to insure availability during the period when you plan to take the oral exam.

Some examples of questions asked about proposals during the oral exam may include: specific details of experimental design, the conceptual basis for the hypothesis, scientific and technical basis of methods used, the global significance or health-relatedness of the project, relation of the project to other work in the field, your knowledge of the literature, and your ability to synthesize and summarize ideas.

A student who fails either portion of the Qualifying Examination can be dismissed from the program. However, students may be permitted at the discretion of the faculty, to take it a second time. Remediation procedures will be established by the committee. If a retake is permitted, students only will have one chance to remediate the failed exam. The retaking of any portion of the Qualifying Examination must take place at least one month from the date of the first examination and no more than six months from that date. The student must be enrolled in GRSC 800 in the term in which any portion of the exam is repeated.

Upon passing Part A and Part B of the Qualifying Examination, students are officially admitted to candidacy for the Ph.D. degree. The *Report on Qualifying Examination Form* should be completed, signed by all committee members, and returned to the Graduate School within 5 days of completing Part B. In addition, students should initiate the paperwork with the Division's Student Affairs Coordinator to designate the Dissertation Committee (use the *Appointment of Dissertation Committee Form*). The Dissertation Committee should be appointed as soon as possible after the student has passed the qualification exam. See page 11 of this handbook for details regarding the composition of the Dissertation committee.



**D. Enrollment in GRSC-800**

If you are not enrolled in any courses the semester you take Part A or B of the Qualifying Examination, you must register for GRSC 800 (*Studies for the Qualifying Examination*). GRSC 800 allows students to maintain full-time status while they prepare for the Qualifying Examination. Students enrolling in their 1<sup>st</sup> semester of GRSC-800 should enroll in GRSC-800a. Students enrolling in their 2nd semester of GRSC-800 should enroll in GRSC-800b. Because two semesters of preparation for the Qualifying Examination should suffice in the vast majority of cases, students enrolling in more than 2 semesters of GRSC-800 (GRSC-800z) will be required to get D clearance from the Graduate School. If you are taking courses the semester you take your Qualifying Examination, enrollment in GRSC 800 is not necessary. See the Division's Student Services Assistant (Sadi Metz) if you have any questions.

# Format For Ph.D. Dissertation Proposal

## Division of Biokinesiology and Physical Therapy

**Format:** 13 pages maximum; 11 font (Arial), 0.5 inch margins, AMA or APA style is acceptable

### 1. Specific Aims (limited to 1 page)

- State concisely the goals of the proposed research and summarize the expected outcome(s), including the IMPACT that the results of the proposed research will exert on the research field(s) involved.
- List succinctly the specific objectives of the research proposed (e.g., to test a stated hypothesis, create a novel design, solve a specific problem, challenge an existing paradigm or clinical practice, address a critical barrier to progress in the field, or develop new technology).

### 2. Research Strategy (limited to 12 pages)

- *Significance*
  - Explain the importance of the problem or critical barrier to progress in the field that the proposed project addresses.
  - Explain how the proposed project will improve scientific knowledge, technical capability, and/or clinical practice in one or more broad fields.
  - Describe how the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field will be changed if the proposed aims are achieved.
- *Innovation*
  - Explain how the application challenges and seeks to shift current research or clinical practice paradigms.
  - Describe any novel theoretical concepts, approaches or methodologies, instrumentation or interventions to be developed or used, and any advantage over existing methodologies, instrumentation, or interventions.
  - Explain any refinements, improvements, or new applications of theoretical concepts, approaches or methodologies, instrumentation, or interventions.
- *Preliminary Studies*
  - Succinctly describe the pilot data obtained to support the proposed hypotheses.
- *Approach*
  - Describe the overall strategy, methodology, and analyses to be used to accomplish the specific aims of the project.
  - Discuss how the expected results will be interpreted with respect to the proposed specific aims.
  - Discuss what you will do if the results do not support your hypothesis (e.g. unexpected results)
  - Discuss potential problems and alternative strategies.

**References and Appendices are not included in the page limits noted above.**

**All figures should be imbedded within the text**

## **Ph.D. Final Defense Procedures**

### **Division of Biokinesiology and Physical Therapy**

Dissertation defenses should be scheduled with the Division's Student Affairs Coordinator (Trinh Nguyen) **at least 60 days prior to the actual defense date**. Advisor approval is required prior to setting a defense date. The Student Affairs Coordinator will reach out to your committee members to establish the day, time, and location for the defense. In addition, the dissertation should be given to your committee **no later than 2 weeks before the defense date**.

The following guidelines will be used for the Ph.D. final defense:

- 1) Presentation of Dissertation (approximately 45 minutes)
  - a. Public welcome
  - b. No questions during presentation
  - c. *Acknowledgments at the end of the presentation should be limited to those who contributed directly to the dissertation (ie. committee members, technical support, subjects, ect.). Funding sources also should be recognized. Please limit acknowledgements to 1 slide!*
- 2) Questions and answers from public audience (approximately 20 minutes)
- 3) Public leaves
- 4) Candidate fields questions from dissertation committee (as long as needed)
- 5) Student leaves
- 6) Committee deliberates outcome of dissertation defense
- 7) Student is brought back to receive result and feedback from committee

## **Guidelines for Remote Participation of a Committee Member at the Qualifying Examination or Dissertation Defense**

The qualifying examination and defense of the dissertation are the two seminal events in a PhD student's degree progression. The qualifying exam committee and the dissertation committee members are carefully chosen by the student for the expertise and content familiarity thought by the student to be essential to the quality of their research. As such, every attempt should be made to ensure that the qualifying exam and dissertation defense be schedule at a time in which all committee members can attend in person. If convening the entire committee for either event is not possible because of extenuating circumstances, then remote participation is possible.

For the PhD Qualifying Examination, a maximum of two committee members may participate remotely. For the PhD dissertation defense, one committee member may participate remotely. In either case, the committee chair and the student must be present, unless the relevant dean and the vice provost for graduate programs provide express written permission for remote participation. Members who participate remotely will be noted on the Report on PhD Qualifying Examination and the dissertation Approval to Submit forms.

Permission to conduct a qualifying examination or dissertation defense involving remote participation requires approval from the Director of the Biokinesiology program.

## **Division Policy for BKN Doctoral Students Planning to Walk at Commencement**

In order for a Ph.D. student to be permitted to walk at commencement in May, there must be a high probability that the dissertation will be completed, including all corrections required by the dissertation committee, by the following June 30th so that the degree can be posted in August. Generally, this means that the dissertation defense must be held by mid-June at the latest. In order for this to occur, the following deadlines must be met:

**February 1:** The Ph.D. advisor and student must notify the division chair (in writing) of the intention of student to walk at graduation. The advisor should verify that the student will meet all required deadlines

**April 15:** The student must have submitted a complete and satisfactory draft of the dissertation to their advisor. If a complete and satisfactory draft is not submitted by this date, the student will not be allowed to walk at commencement regardless of any prior plans that have been made.

Failure on the part of the advisor and/or student to meet either of these deadlines will result in the student not being permitted to walk at commencement.

# **Responsibilities of Qualifying Exam Committee Members**

## **Division of Biokinesiology & Physical Therapy**

Thank you for agreeing to participate on a Ph.D. qualifying exam committee for a student enrolled in the Biokinesiology program at USC. You have been identified as a faculty member who has a particular expertise that will contribute to the Ph.D. student's preparation as a scholar. The faculty of the Biokinesiology program encourages committee members to take an active role in the mentoring process. In particular, it is expected that committee members:

1. Meet regularly with the student during the development of the dissertation proposal.
2. Provide guidance to the student in developing appropriate research question(s) and methodology.
3. Participate in the development of the written research proposal.
4. Provide a question for the written portion of the Qualifying Examination.
5. Provide feedback to the student regarding the written portion of the Qualifying Examination.
6. Provide guidance to the student as the dissertation research is being conducted.

If you have any questions regarding your role as a Ph.D. qualifying exam committee member for the Division of Biokinesiology & Physical Therapy please contact Dr. Christopher Powers at 323-442-1928.

### **AGREEMENT:**

Your signature indicates that you have read this document and that you agree to the responsibilities outlined above.

Student's Name \_\_\_\_\_

Faculty Signature \_\_\_\_\_

Date \_\_\_\_\_

# **Compact Between Biomedical Graduate Students and Their Research Advisors**

**Composed by the Group on Graduate Research, Education and Training  
A National Forum consisting of faculty Administrative leaders of Biomedical Ph.D, MD-Ph.D.  
and postdoctoral programs**

Pre-doctoral training entails both formal education in a specific discipline and an apprenticeship in which the graduate student trains under the supervision of one or more investigators who are qualified to fulfill the responsibilities of a mentor. A positive mentoring relationship between the pre-doctoral student and the research advisor is a vital component of the student's preparation to become not only an independent and successful research scientist but also an effective mentor to future graduate students.

Individuals who pursue a biomedical graduate degree are expected to take responsibility for their own scientific and professional development. Faculty who advise students are expected to fulfill the responsibilities of a mentor, including the provision of scientific training, guidance, instruction in the Responsible Conduct of Research and research ethics, and financial support. The faculty advisor also performs a critical function as a scientific role model for the graduate student.

## **Core Tenets of Pre-doctoral Training**

### **Institutional Commitment**

Institutions that train biomedical graduate students must be committed to establishing and maintaining high- quality training programs with the highest scientific and ethical standards. Institutions should work to ensure that students who complete their programs are well-trained and possess the foundational skills and values that will allow them to mature into independent scientific professionals of integrity. Institutions should provide oversight for length of study, program integrity, stipend levels, benefits, grievance procedures, and other matters relevant to the education of graduate students. Additionally, they should recognize and reward their graduate training faculty.

### **Program Commitment**

Graduate programs should endeavor to establish graduate training programs that provide students with the skills necessary to function independently in a scientific setting by the time they graduate. Programs should strive to maintain scientifically relevant course offerings and research opportunities. Programs should establish clear parameters for outcomes assessment and closely monitor the progress of graduate students during their course of study.

### **Quality Mentoring**

Effective mentoring is crucial for graduate school trainees as they begin their scientific careers. Faculty mentors must commit to dedicating substantial time to the graduate students to ensure their scientific, professional and personal development. A relationship of mutual trust and respect should be established between mentors and graduate students to foster healthy interactions and encourage individual growth. Effective mentoring should include teaching the scientific method, providing regular feedback in the form of praise and constructive criticism to foster individual growth, teaching the "ways" of the scientific enterprise, and promoting students' careers by providing appropriate opportunities. Additionally, good graduate school mentors should be careful listeners, actively promote and appreciate diversity, possess and consistently exemplify high ethical standards, recognize the contributions of students in publications and intellectual property, and have a strong record of research accomplishments and financial support.

## **Provide Skills Sets and Counseling that Support a Broad Range of Career Choices**

The institution, training programs, and mentor should provide training relevant to academic, industrial, and research careers that will allow their graduate students to appreciate, navigate, discuss, and develop their career choices. Effective and regular career guidance activities should be provided, including exposure to academic and non-academic career options.

## **Commitments of Graduate Students**

- **I acknowledge that I have the primary responsibility for the successful completion of my degree.** I will be committed to my graduate education and will demonstrate this by my efforts in the classroom and the research laboratory. I will maintain a high level of professionalism, self-motivation, engagement, scientific curiosity, and ethical standards.
- **I will meet regularly with my research advisor and provide him/her with updates on the progress and results of my activities and experiments.**
- **I will work with my research advisor to develop a thesis/dissertation project.** This will include establishing a timeline for each phase of my work. I will strive to meet the established deadlines.
- **I will work with my research advisor to select a thesis/dissertation committee.** I will commit to meeting with this committee at least annually (or more frequently, according to program guidelines). I will be responsive to the advice of and constructive criticism from my committee.
- **I will be knowledgeable of the policies and requirements of my graduate program, graduate school, and institution.** I will commit to meeting these requirements, including teaching responsibilities.
- **I will attend and participate in laboratory meetings, seminars and journal clubs that are part of my educational program.**
- **I will comply with all institutional policies, including academic program milestones.** I will comply with both the letter and spirit of all institutional safe laboratory practices and animal-use and human-research policies at my institution.
- **I will participate in my institution's Responsible Conduct of Research Training Program and practice those guidelines in conducting my thesis/dissertation research.**
- **I will be a good lab citizen.** I will agree to take part in shared laboratory responsibilities and will use laboratory resources carefully and frugally. I will maintain a safe and clean laboratory space. I will be respectful of, tolerant of, and work collegially with all laboratory personnel.
- **I will maintain a detailed, organized, and accurate laboratory notebook.** I am aware that my original notebooks and all tangible research data are the property of my institution but that I am able to take a copy of my notebooks with me after I complete my thesis/dissertation.



- **I will discuss policies on work hours, sick leave and vacation with my research advisor.** I will consult with my advisor and notify fellow lab members in advance of any planned absences.
- **I will discuss policies on authorship and attendance at professional meetings with my research advisor.** I will work with my advisor to submit all relevant research results that are ready for publication in a timely manner prior to my graduation.
- **I acknowledge that it is primarily my responsibility to develop my career following the completion of my doctoral degree.** I will seek guidance from my research advisor, career counseling services, thesis/dissertation committee, other mentors, and any other resources available for advice on career plans.

### **Commitments of Research Advisors**

- **I will be committed to the life-long mentoring of the graduate student.** I will be committed to the education and training of the graduate student as a future member of the scientific community.
- **I will be committed to the research project of the graduate student.** I will help to plan and direct the graduate student's project, set reasonable and attainable goals, and establish a timeline for completion of the project. I recognize the possibility of conflicts between the interests of externally funded research programs and those of the graduate student, and will not let these interfere with the student's pursuit of his/her thesis/dissertation research.
- **I will be committed to meeting one-on-one with the student on a regular basis.**
- **I will be committed to providing financial resources for the graduate student as appropriate or according to my institution's guidelines, in order for him/her to conduct thesis/dissertation research.**
- **I will be knowledgeable of, and guide the graduate student through, the requirements and deadlines of his/her graduate program as well as those of the institution, including teaching requirements and human resources guidelines.**
- **I will help the graduate student select a thesis/dissertation committee.** I will assure that this committee meets at least annually (or more frequently, according to program guidelines) to review the graduate student's progress.
- **I will lead by example and facilitate the training of the graduate student in complementary skills needed to be a successful scientist, such as oral and written communication skills, grant writing, lab management, animal and human research policies, and the ethical conduct of research.** I will encourage the student to seek opportunities in teaching, if not required by the student's program.
- **I will expect the graduate student to share common laboratory responsibilities and utilize resources carefully and frugally.**
- **I will not require the graduate student to perform tasks that are unrelated to his/her training program and professional development.**

- **I will discuss authorship policies regarding papers with the graduate student.** I will acknowledge the graduate student’s scientific contributions to the work in my laboratory, and I will work with the graduate student to publish his/her work in a timely manner prior to the student’s graduation.
- **I will discuss intellectual policy issues with the student with regard to disclosure, patent rights and publishing research discoveries.**
- **I will encourage the graduate student to attend scientific/professional meetings and make an effort to secure and facilitate funding for such activities.**
- **I will provide career advice and assist in finding a position for the graduate student following his/her graduation.** I will provide honest letters of recommendation for his/her next phase of professional development. I will also be accessible to give advice and feedback on career goals.
- **I will provide for every graduate student under my supervision an environment that is intellectually stimulating, emotionally supportive, safe, and free of harassment.**
- **Throughout the graduate student’s time in my laboratory, I will be supportive, equitable, accessible, encouraging, and respectful.** I will foster in the graduate students professional confidence and encourage critical thinking, skepticism and creativity.

**AGREEMENT:**

Your signature indicates that you have read this document and that you agree to the responsibilities outlined above.

Student’s Name \_\_\_\_\_

Faculty Signature \_\_\_\_\_

Date \_\_\_\_\_

# Biokinesiology Student Council

The purpose of the BKN Student Council is to encourage interaction among students in the PhD and MS programs and represent BKN students at division-wide events. The BKN Student council is responsible for the planning and execution of three important co-curricular activities throughout the academic year: the Biokinesiology Student Seminar Series, Biokinesiology Student Survival series, and the Biokinesiology Student-Invited Speaker Series.

The Biokinesiology student body is represented by a student council consisting of 5 members: a President, and one PhD representative from each research domain (Exercise Physiology, Biomechanics, Motor Behavior/Control/Development), and one MS student representative. Representatives serve a one-year term, starting in January and ending at the end of the calendar year.

## Elections:

Council members are elected by the BKN student body. Voting occurs in late November or early December of each year. Students first nominate candidates and vote for the position of President. Following election of the President, students from each research domain nominate and vote for their own representative. Only MS students will vote for the MS representative. Nominated candidates have the option of declining the nomination.

Typically, first year students are not nominated for representative positions. In addition, students usually serve one year as a representative before being nominated for the President position.

## Roles & Responsibilities:

The BKN Student Council President oversees BKN council activities and meetings. Council meetings should occur at least once a semester. The President also is a member of the Research Advancement Committee (RAC) and attends their quarterly meetings. The President acts as a liaison between the faculty and the BKN student body.

The BKN student representatives attend the annual BKN faculty retreat. Here the students bring issues to the faculty that affect the program and update the faculty on student activities and initiatives.

As a whole, the BKN Student Council will strive to address the concerns of BKN students and encourage representation of BKN students at division-wide events.

## **Biokinesiology Seminar/Survival Series**

The Biokinesiology Seminar series is held weekly throughout the fall and spring semesters. The purpose of the seminar is to provide PhD students the opportunity to present their research to the faculty and their peers. Three faculty members are assigned to each week's seminar to serve as discussion facilitators. Faculty gauge questions and discussion in accordance with the student's level in the program. The goal is to create a positive and collaborative environment to help stimulate thought and discussion.

PhD students are assigned a date to present once every academic year. Students who are in their first year or last year of the PhD program may be excused from presenting. Presentations should be approximately 30 minutes in length. The goal of the presentation should be to generate discussion among students and faculty on the given topic.

The Biokinesiology Survival series is held twice a semester and features presentations by faculty members and/or invited speakers concerning topics related to career development including applying for post-doc positions, career options in industry, grant writing, interviewing for a faculty position, etc.

Attendance at the BKN seminar and survival series is mandatory for all BKN students. To be excused, the following procedure needs to be followed:

- 1) Obtain approval from your advisor.
- 2) Obtain approval from the director of the BKN program.
- 3) Once both approvals have been obtained, please notify the BKN student in charge of attendance so they can mark you down as "excused".

Unexcused absences from seminar are not permitted. An unavoidable class conflict or attendance at a scientific meeting is a valid excuse for missing seminar. Data collection is NOT a valid excuse for missing seminar!

## **Process for Appealing Dismissal from the PhD Program**

The student may appeal in writing to the department chair or program director within 30 days of the date of dismissal. If the student is dissatisfied with the outcome of the appeal, then, within 30 days of the date of the department's or program's decision, they may appeal in writing to the dean of the school. If the second appeal is unsuccessful, then the student may appeal in writing to the Vice Provost for Graduate Programs. Such an appeal must be received within 6 months after the student has received notice of the outcome of the school's decision.

# Required Certifications & Health Related Requirements

Students enrolled in the Biokinesiology program are required to maintain the following certifications:

- 1) Collaborative IRB Training Initiative (CITI) certification. This online human subjects education program can be accessed online through the USC website. <http://www.usc.edu/admin/provost/opr/citi>
- 2) Health Insurance Portability and Accountability Act (HIPAA) certification. The HIPAA education program can be accessed through the USC Office of Compliance. [http://www.usc.edu/admin/compliance/hipaa\\_program.html](http://www.usc.edu/admin/compliance/hipaa_program.html)
- 3) Cardiopulmonary Resuscitation (CPR)  
CPR and Automated External Defibrillation (AED) certification is required, and must be kept current.

Additional information concerning the roles and responsibilities of student researchers at USC can be found at the following website: <http://www.usc.edu/admin/provost/opr/research/student.html>

All students are required to have health insurance coverage while enrolled in the BKN program. Immunizations and titers are required as well as annual TB screenings. All health clearances must be kept current the entire time students are in the program.

# Ph.D. Student Self-Assessment

To facilitate your timely progress through your degree program, the BKN faculty requires a yearly self-assessment of your progress. The purpose of the self-assessment is to help you through your program of study, identify obstacles, acknowledge achievements, and prevent unnecessary delays. **PhD candidates are required to meet with their committee as a whole to provide an update on their progress towards completing the dissertation. The PhD candidate should take the initiative to organize this meeting prior to July 1.**

Please rank yourself using the categories listed below to classify your performance over the past academic year. Include your current GPA as part of your summary.

**Category 1:** Acceptable performance (information on any awards, honors, grants, scholarships, and publications).

**Category 2:** Acceptable performance with certain exceptions. A typical example for this category is that students did not take the qualifying exam on time or that subject recruitment is progressing slowly, etc.

**Category 3:** Unacceptable performance. (This is the most serious evaluation).

Students are informed as to the outcome of the annual review by their faculty advisor. Students who receive a category 2 or 3 rating are placed on a 6-month review cycle. Students who receive a category 3 rating must develop a remediation plan that is approved by the faculty advisor and the Director of the Biokinesiology program. Two successive category 3 ratings are considered basis for dismissal from the Ph.D. program.

Please use the following format in preparing your self-assessment

**Name:**

**Semester admitted to PhD program:**

**Category:**

**GPA:**

**Narrative Summary (2 pages maximum):**

- 1) Describe your thesis project or research direction (½ page).
- 2) Using the timeline outlined on page 31, reflect upon your progress in the PhD program. Are you on schedule? If not, why? What do you need to do get back on schedule?
- 3) Provide information related to specific accomplishments during the past year (ie, publications, abstracts, grants, awards, etc.).
- 4) Set goals for the upcoming year and create a month-by-month timeline for the next 12 months.

# Teaching Assistant Evaluation

## Division of Biokinesiology and Physical Therapy

Teaching Assistant \_\_\_\_\_ Semester \_\_\_\_\_ Year \_\_\_\_\_

Course \_\_\_\_\_ Instructor \_\_\_\_\_

Please assess whether the teaching assistant exceeded expectations (EE), met expectations (ME), did not meet expectations (NM), or whether the responsibility did not apply (NA).

EE	ME	NM	NA	Attend course lectures (specify all or specific ones).
EE	ME	NM	NA	Engage in laboratory teaching for PT _____ (class number).
EE	ME	NM	NA	Meet with course director weekly.
EE	ME	NM	NA	Keep office hours, meeting with students individually and in groups.
EE	ME	NM	NA	Lead student tutorial sessions.
EE	ME	NM	NA	Evaluate class supply needs and prepare supply orders.
EE	ME	NM	NA	Ensure that the required equipment is operational prior to the laboratory session.
EE	ME	NM	NA	Prepare/set-up equipment for laboratory sessions.
EE	ME	NM	NA	Put equipment away and clean up after laboratory sessions.
EE	ME	NM	NA	Prepare laboratory lectures.
EE	ME	NM	NA	Contribute to the content of practical examinations.
EE	ME	NM	NA	Contribute to the preparation of written examinations.
EE	ME	NM	NA	Proctor examinations.
EE	ME	NM	NA	Lead examination review sessions.
EE	ME	NM	NA	Grade laboratory assignments.
EE	ME	NM	NA	Assist in the evaluation of practical examinations.
EE	ME	NM	NA	Assist in grading group projects.
EE	ME	NM	NA	Assist in grading examinations.
EE	ME	NM	NA	Prepare and deliver 1 or more lectures.
EE	ME	NM	NA	Prepare audio-visual aids prior to class.
EE	ME	NM	NA	Prepare handouts.
EE	ME	NM	NA	Prepare readings.
EE	ME	NM	NA	Assist in preparation of the course reader.
EE	ME	NM	NA	Assist in preparation of the laboratory syllabus.
EE	ME	NM	NA	Assist in preparation of the laboratory manual.

Comments regarding other responsibilities:

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Signature of Teaching Assistant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Course Director

\_\_\_\_\_  
Date

(Check: copy for TA\_\_\_\_; copy for student file\_\_\_\_; copy for course director\_\_\_\_)



# **Ethics Guidelines For Graduate Study**

## **Division of Biokinesiology & Physical Therapy**

### **INTRODUCTION**

“The scientific research enterprise, like other human activities, is built on a foundation of trust. Scientists trust that the results reported by others are valid. Society trusts that the results of research reflect an honest attempt by scientists to describe the world accurately and without bias. The level of trust that has characterized science and its relationship with society has contributed to a period of unparalleled scientific productivity. But this trust will endure only if the scientific community devotes itself to exemplifying and transmitting the values associated with ethical scientific conduct” (1).

The faculty of the Division of Biokinesiology and Physical Therapy has identified two areas of ethical conduct we believe are critical to your development as an independent researcher: 1) faculty and graduate student relations, and 2) responsible conduct in research. In an effort to familiarize you with these areas we have organized the following references for your review. Please take time to review these materials and discuss them with your advisor. Once reviewed, please sign the attached signature page. This written assurance of ethical conduct will be kept in your student file for the duration of your tenure as a graduate student in the Division of Biokinesiology and Physical Therapy.

### **ACADEMIC INTEGRITY: A GUIDE FOR GRADUATE STUDENTS**

Reference: Student Handbook: USC Office of Student Affairs

### **ON BEING A SCIENTIST: RESPONSIBLE CONDUCT IN RESEARCH**

Reference: National Academies Press, 3rd ed., <http://nap.edu/12192>

### **AGREEMENT:**

Your signature indicates that you have read the attached documents and that you agree to adhere to the policies and procedures required for ethical scientific study.

Student's Name \_\_\_\_\_

Students Signature \_\_\_\_\_

Date \_\_\_\_\_

(1) On Being a Scientist, 2<sup>nd</sup> ed., National Academy Press, Washington D.C., 1995