**LEHMAN COLLEGE**
**OF THE**
**CITY UNIVERSITY OF NEW YORK**

**DEPARTMENT OF EXERCISE SCIENCES AND RECREATION**

**CURRICULUM CHANGE**

Name of Program and Degree Award: Human Performance and Fitness, PhD
Hegis Number: 1299.00
Program Code: 44097
Effective Term: Spring 2027

1. **Type of Change:** Change in Elective Courses

2. **From:**
**Human Performance and Fitness, PhD**

**Admission Requirements**

**Type:** Completion requirement

- A master's degree (or its equivalent) from an accredited college or university in an exercise-related field
- Demonstrated capability of independent research, such as completion of a thesis, presentation of a poster at a scientific conference and/or publication of a research paper.
- Approval of a faculty member willing to supervise the student's doctoral work. It is advisable for students to contact the professor that they are interested in working with prior to applying to the program.
- Submission of 2 letters of recommendation, at least one of which must be from a university professor who has directly taught and/or supervised the student.
- Submission of a personal statement of approximately 500 words discussing the applicant's preparation for doctoral work and interest in pursuing a scholarly career

**Degree Requirements – Doctor of Philosophy**
**Type:** Completion requirement
**Earn ~~at least 62~~ credits**

**Degree Requirements – Program Overview**
The PhD degree in Human Performance and Fitness is a ~~62~~ -credit on-campus program designed to prepare students in the areas of kinesiology, physiology, sports nutrition, and related exercise sciences for careers in research, education, and sport. Lehman College is the only public institution in NYC to offer a PhD degree program with an exercise-related focus. Moreover, it is the only PhD degree program in the greater New York metropolitan area specifically developed with a focus on enhancing human

performance and fitness. This degree program is designed to equip students with the necessary skills and competencies required to become scholars in human health, fitness, and performance, and ultimately pursue practical, educational- and research-related opportunities in this realm. The program is a research-intensive degree where students complete a large interventional study for fulfillment of their dissertation. Students will be encouraged to publish preliminary studies throughout their time in the program, with their dissertation study published following conference of the degree. To graduate from the program, students must complete a minimum of ~~50~~ doctoral credits pre-candidacy (beyond the master's level) and an additional 12 credits candidacy work, with an expected graduation in 4 to 5 years depending on the research topic and complexity of the study design(s).

**Degree Requirements - Coursework**

**Type:** Completion requirement

~~The following is a listing by terms of courses that comprise the 62 -credit Doctor of Philosophy in Human Performance and Fitness. Coursework must include at least 6 credits in statistical-related coursework and 12 credits in research-based coursework~~.

~~**Fulfill ALL of the following requirements:**~~
~~**Semester 1 Fall**~~
~~**Complete ALL of the following Courses:**~~
~~EXS 901 - Physical Activity, Exercise and Fitness in Research~~
~~EXS 902 - Applied Exercise Physiology in Human Performance~~
~~EXS 903 - Research Design in Human Performance~~
~~AND~~
~~**Semester 2 Spring**~~
~~**Complete ALL of the following Courses:**~~
~~EXS 904 - Assessments for Exercise Research and Prescription~~
~~EXS 905 - Research in Sports Nutrition~~
~~EXS 906 - Applied Training Methodologies for Human Performance~~
~~AND~~
~~**Semester 3 Fall**~~
~~**Complete ALL of the following Courses:**~~
~~EXS 915 - Methods in Biomechanical Analysis~~
~~EXS 916 - Applied Concepts in Motor Learning and Performance~~
~~EXS 917 - Evidence-Based Principles in Strength and Hypertrophy~~
~~AND~~
~~**Semester 4 Spring**~~
~~**Complete ALL of the following Courses:**~~
~~EXS 920 - Statistical Modeling for Research in Exercise Science~~
~~EXS 940 - Pedagogy in Exercise Science~~
~~EXS 965 - Advanced Sport Psychology~~
~~AND~~
~~**Semester 5 Fall**~~
~~**Complete ALL of the following Courses:**~~

~~EXS 970 - Research Practicum in Human Performance~~
~~EXS 975 - Meta-Analyses Practicum~~
~~MAT 582 - Statistics for Students in Biological, Health, and Social Sciences~~
~~AND~~
~~**Semester 6 Spring**~~
~~**Complete ALL of the following Courses:**~~
~~EXS 990 - Doctoral Seminar~~
~~EXS 970 - Research Practicum in Human Performance~~
~~AND~~
~~**Semester 7 Fall**~~
~~**Complete ALL of the following Courses:**~~
~~EXS 991 - Doctoral Dissertation 1~~
~~AND~~
~~**Semester 8 Spring**~~
~~**Complete ALL of the following Courses:**~~
~~EXS 992 - Doctoral Dissertation 2~~

3. **To:**
**Human Performance and Fitness, PhD**

**Admission Requirements**

- Official transcripts from all post-secondary institutions attended
- A master's degree (or its equivalent) from an accredited college or university in an exercise-related field
- Demonstrated capability of independent research, such as completion of a thesis, presentation of a poster at a scientific conference and/or publication of a research paper.
- Approval of a faculty member willing to supervise the student's doctoral work. It is advisable for students to contact the professor that they are interested in working with prior to applying to the program.
- Submission of 2 letters of recommendation, at least one of which must be from a university professor who has directly taught and/or supervised the student.
- Submission of a personal statement of approximately 500 words discussing the applicant's preparation for doctoral work and interest in pursuing a scholarly career

**Degree Requirements – Doctor of Philosophy**
**Type:** Completion requirement
**Earn 63 credits**

**Degree Requirements – Program Overview**
The PhD degree in Human Performance and Fitness is a 63-credit on-campus program designed to prepare students in the areas of kinesiology, physiology, sports nutrition, and related exercise sciences for careers in research, education, and sport. Lehman College is the only public institution in NYC to offer a PhD degree program with an exercise-related focus. Moreover, it is the only PhD degree program in the greater New York metropolitan area specifically developed with a focus on enhancing human performance and fitness. This degree program is designed to equip students with the

necessary skills and competencies required to become scholars in human health, fitness, and performance, and ultimately pursue practical, educational- and research-related opportunities in this realm. The program is a research-intensive degree where students complete a large interventional study for fulfillment of their dissertation. Students will be encouraged to publish preliminary studies throughout their time in the program, with their dissertation study published following conference of the degree. To graduate from the program, students must complete a minimum of 51 doctoral credits pre-candidacy (beyond the master's level) and an additional 12 credits candidacy work, with an expected graduation in 4 to 5 years depending on the research topic and complexity of the study design(s).

**Degree Requirements - Coursework**

**Type:** Completion requirement

The following is a listing by terms of courses that comprise the Doctor of Philosophy in Human Performance and Fitness program. Coursework must include at least 6 credits in statistical-related coursework and 12 credits in research-based coursework for a total of 63 credits.

| | **Core Courses (15 credits)** | **Credits** |
|---|---|---|
| EXS 903 | Research Design in Human Performance | 3 |
| EXS 920 | Statistical Modeling for Research in Exercise Science | 3 |
| EXS 970 | Research Practicum in Human Performance | 3 |
| EXS 975 | Meta-Analysis Practicum | 3 |
| EXS 990 | Doctoral Seminar | 3 |
| | **Elective Courses (36 credits)** | **Credits** |
| EXS 901 | Physical Activity, Exercise and Fitness in Research | 3 |
| EXS 902 | Applied Exercise Physiology in Human Performance | 3 |
| EXS 904 | Assessments for Exercise Research and Prescription. | 3 |
| EXS 905 | Research in Sports Nutrition | 3 |
| EXS 906 | Applied Training Methodologies in Human Performance | 3 |
| EXS 915 | Methods in Biomechanical Analysis | 3 |
| EXS 916 | Applied Concepts in Motor Learning and Performance | 3 |
| EXS 917 | Evidence-Based Principles in Strength and Hypertrophy | 3 |
| EXS 921 | Measurement in Sport & Exercise Science | 3 |
| EXS 940 | Pedagogy in Exercise Science | 3 |
| EXS 965 | Advanced Sport Psychology | 3 |
| MAT 582 | Statistics for Students in Biological, Health, and Social Sciences | 3 |
| MAT 782 | Mathematical Statistics | 3 |
| | **Thesis (12 credits)** | **Credits** |
| EXS 991 | Dissertation 1 | 6 |
| EXS 992 | Dissertation 2 | 6 |

4. **Rationale :**

- The existing course, MAT 782, has been included as an elective. A new course, EXS 921, is also being added as an elective. Students in the PhD program must complete at least 6 credits of statistical coursework. However, the program lacks a sufficient number of statistical courses at the graduate level, thus requiring students to take courses outside of department. We thus need additional statistical elective courses to allow students to complete coursework within the department. Currently, there is no course in the PhD program that provides insights into the complexities of measurement in exercise science. These skills are important for doctoral students in human performance both from a practical and research standpoint. These elective courses will help provide students with the skills and competencies necessary to design and develop instruments for assessment of fitness outcomes, as well as to understand their properties, applications and interpretations.
- Given the only option students have based on the curriculum is to take 63 credits, the total number of required credits for the program has been increased to 63. This increase accurately represents the number of credits students actually take.
- The curriculum was also reorganized to make the requirements clearer for students.

5. **Date of departmental approval:** 10/9/2025

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**CURRICULUM CHANGE**

1. **Type of change:** New Course

| | |
|---|---|
| Department(s) | Exercise Science and Recreation |
| Career | [ ] Undergraduate [X] Graduate |
| Academic Level | [X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial |
| Subject Area | Human Performance and Fitness |
| Course Prefix & Number | EXS 921 |
| Course Title | Measurement in Sport & Exercise Science |
| Description | Develop an understanding of validity, reliability, responsiveness, scaling, questionnaire design, and interpretation of measurement tools in practical and research contexts. |
| Pre/ Co Requisites | |
| Credits | 3 |
| Hours | 3 |
| Liberal Arts | [ ] Yes [X] No |
| Course Attribute (e.g. Writing Intensive, WAC, etc) | |
| General Education Component | _X__ Not Applicable<br>____ Required<br>____ English Composition<br>____ Mathematics<br>____ Science<br><br>____ Flexible<br>____ World Cultures<br>____ US Experience in its Diversity<br>____ Creative Expression<br>____ Individual and Society<br>____ Scientific World |

3. **Rationale:**
Students in the PhD program must complete at least 6 credits of statistical coursework. However, the program lacks a sufficient number of statistical courses at the graduate

level, thus requiring students to take courses outside of department. We thus need additional statistical elective courses to allow students to complete coursework within the department. Currently, there is no course in the PhD program that provides insights into the complexities of measurement in exercise science. These skills are important for doctoral students in human performance both from a practical and research standpoint. This elective course will help provide students with the skills and competencies necessary to design and develop instruments for assessment of fitness outcomes, as well as to understand their properties, applications and interpretations.

4. **Learning Outcomes (By the end of the course students will be expected to):**

1. Explain key concepts of measurement principles
2. Develop measurement instruments
3. Evaluate instrument properties
4. Select appropriate instruments
5. Interpret measurement results
6. Critically assess exercise science literature
7. Apply concepts to practice

5. **Date of Departmental Approval:** 10/09/2025