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| <b>USC SCHOOL</b>          | Keck School of Medicine     |
| <b>ACADEMIC DEPARTMENT</b> | Physiology and Neuroscience |
| <b>GRADUATE PROGRAM</b>    | M.S. Medical Physiology     |
| <b>POST CODE</b>           | 1594                        |
| <b>TERM EFFECTIVE DATE</b> | Spring 2021                 |

**PROGRAM DESCRIPTION**

A brief description of the graduate program.

The overarching objective of the MS Program in Medical Physiology is to imbue in its graduates a perspective that helps translate basic science discoveries into treatments of disease and strategies to promote health. Exposing students to studies involving many organism functions not only stimulates thoughts regarding therapeutic and health-promoting opportunities but also tempers those thoughts with the recognition of how modification of one function may lead to changes in other functions that are either beneficial or harmful. The program also seeks to train students in effective written and oral communication.

**COMMON BACHELOR DEGREE PROGRAM PATHWAYS**

A list of common bachelor's degrees that undergraduate students pursue in advance of pursuing a progressive degree option with this graduate program. Some programs are restricted to certain majors while others are open to all students.

|  |  |
|--|--|
| Human Biology  |  |
| Neuroscience   |  |
| Biochemistry   |  |
| Any major in the biological sciences. This program is not restricted to specific majors. |  |

**PREPARATORY UNDERGRADUATE COURSES**

A list of courses at the undergraduate level that prepare students for the graduate program. Required coursework is listed first, followed by recommended courses. If not applicable, this section will be blank.

| Dept. Prefix - Course # | Course Title | Required or Recommended | Units |
|-------------------------|--------------|-------------------------|-------|
|                         | NONE         |                         |       |

**UNDERGRADUATE COURSES USED TO REDUCE GRADUATE LEVEL UNITS**

A list of undergraduate level courses that may be used to reduce the number of graduate level units required for the graduate program. If there are none, that is specified instead.

| Dept. Prefix - Course # | Course Title | Units |
|-------------------------|--------------|-------|
|                         | NONE         |       |

**CORE GRADUATE PROGRAM REQUIREMENTS (# units required)**

A list of all required graduate courses for the graduate program. None of these courses may be used toward satisfying undergraduate degree requirements.

*If special exceptions for any of these courses are made by the academic department, the course # is marked with an asterisk (\*) and the exception is explained in the "Department Notes" section at the end of this course plan template.*

| <b>Dept. Prefix - Course #</b> | <b>Course Title</b>   | <b>Units</b>                                |
|--------------------------------|---|---|
| *INTD 531                      | Cell Biology  | 4   |
| *INTD 561                      | Molecular Biology   | 4   |
| MPHY 573                       | Medical Physiology II   | 4   |
| *PM 510L                       | Principle of Statistics   | 4   |
| MPHY 572                       | Medical Physiology I  | 4   |
| PHB 550                        | Seminar in Advanced Cellular, Molecular and Systematic Physiology | 2   |
| MPHY 594A                      | Thesis Research   | 2   |
| MPHY 594B                      | Thesis Research   | 2   |
| MPHY 590                       | Directed Research   | 8 (units vary to meet 32 units requirement) |

**PRE-APPROVED ELECTIVE COURSEWORK**

Elective coursework is approved at the discretion of the academic department. Note the following details about the total number and units required of elective coursework.

|   |  |
|---|--|
| 0 | <b>TOTAL ELECTIVE COURSES REQUIRED FOR THE TRADITIONAL GRADUATE DEGREE</b> |
| 0 | <b>TOTAL ELECTIVE UNITS REQUIRED FOR THE TRADITIONAL GRADUATE DEGREE</b>   |

**TOTAL UNIT COUNTS AND REQUIRED GRADUATE UNITS**

|    |  |
|----|--|
| 32 | <b>TOTAL UNITS REQUIRED FOR THE TRADITIONAL GRADUATE DEGREE</b>                |
| 0  | <b>TOTAL GRADUATE UNITS THAT MAY BE WAIVED (IF ANY)</b>                        |
| 32 | <b>MINIMUM NUMBER OF GRADUATE UNITS THAT MUST BE AT THE 500 LEVEL OR ABOVE</b> |

**NOTES FROM THE DEPARTMENT**

This section highlights any unique considerations, exceptions, or requirements for the graduate program. If a program has specific restrictions (courses, majors, etc.), they are detailed below.

Courses marked with "\*" may either be waived based on other coursework completed by the student or another course may be substituted consistent with program goals and the interest of the student.

Enrollment in the Medical Physiology MS Program is normally in the thesis track under the guidance of a faculty mentor. Admission requires agreement between an applicant and a faculty member regarding mentorship and the general field of study. After receipt of application materials interviews will be held, either in person or online, involving the applicant and potential mentors and colleagues. The interviews will include discussion of the content in the submitted materials. The interview is meant to provide the applicant with an opportunity to demonstrate critical reasoning abilities regarding their research experiences and research topics of interest.

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Axel H. Schönthal

**Name of Authorizing Master's Program Dean**

4/4/2021

**Date Approved**

Associate Dean for Biomedical Master's Programs

**Authorizing Dean's Title**