

# REHABILITATION SCIENCE (REHAB SCI)

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## REHAB SCI 200A Laboratory Rotation I (3 Units) Fall, Winter, Spring

*Instructor(s):* Richard Souza  
*Prerequisite(s):* None

**Restrictions:** First-year students in the PhD in Rehabilitation Science program

**Activities:** Lab science

Students will rotate through different faculty laboratories to learn new instrumentation and scientific methodology and undertake an individual study with emphasis on special problems in rehabilitation science including areas related to the student's long term interests, future research interests, or clinical specialization.

**School:** Graduate Division

**Department:** Rehabilitation Science Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** No

**Course Grading Convention:** P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**Graduate Division course:** Yes

**Is this a web-based online course?** No

**Is this an Interprofessional Education (IPE) course?** No

**May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course?** Yes

**Repeat course for credit?** No

## REHAB SCI 200B Laboratory Rotation II (3 Units) Fall, Winter, Spring

*Instructor(s):* Richard Souza  
*Prerequisite(s):* RS200A

**Restrictions:** First-year students in the PhD in Rehabilitation Science program

**Activities:** Lab science

Students will rotate through different faculty laboratories to learn new instrumentation and scientific methodology and undertake an individual study with emphasis on special problems in rehabilitation science including areas related to the student's long term interests, future research interests, or clinical specialization. The goals of this course are to provide overall exposure to various lab environments to assist the student in identifying a lab in which to perform their dissertation work.

**School:** Graduate Division

**Department:** Rehabilitation Science Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** No

**Course Grading Convention:** P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**Graduate Division course:** Yes

**Is this a web-based online course?** No

**Is this an Interprofessional Education (IPE) course?** No

**May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course?** Yes

**Repeat course for credit?** No

## REHAB SCI 200C Laboratory Rotation III (3 Units) Fall, Winter, Spring

*Instructor(s):* Richard Souza  
*Prerequisite(s):* RS200A, RS200B

**Restrictions:** First-year students in the PhD in Rehabilitation Science program

**Activities:** Lab science

Students will rotate through different faculty laboratories to learn new instrumentation and scientific methodology and undertake an individual study with emphasis on special problems in rehabilitation science including areas related to the students' long term interests, future research interests, or clinical specialization. The goals of this course are to provide overall exposure to various lab environments to assist the student in identifying a lab in which to perform their dissertation work.

**School:** Graduate Division

**Department:** Rehabilitation Science Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** No

**Course Grading Convention:** P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**Graduate Division course:** Yes

**Is this a web-based online course?** No

**Is this an Interprofessional Education (IPE) course?** No

**May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course?** Yes

**Repeat course for credit?** No

## **REHAB SCI 201 Introduction to Rehabilitation Science (2 Units) Fall, Winter, Spring**

*Instructor(s):* Richard Souza

*Prerequisite(s):* Consent of instructor.

*Restrictions:* First-year students in the PhD in Rehabilitation Science program.

*Activities:* Lecture

This required course for PhD students 1) provides an introduction to the areas of rehabilitation science research, and 2) provides historical perspective on the major issues in rehabilitation science. Students will learn about resources and on-going research projects within the University, and will read classic papers of the last 150 years with the objective of understanding the fundamental discoveries that have shaped the discipline of rehabilitation science.

**School:** Graduate Division

**Department:** Rehabilitation Science Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** No

**Course Grading Convention:** Letter Grade

**Graduate Division course:** Yes

**Is this a web-based online course?** No

**Is this an Interprofessional Education (IPE) course?** No

**May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course?** Yes

**Repeat course for credit?** No

## **REHAB SCI 202 Gross and Regional Anatomy (1 Units) Winter, Spring**

*Instructor(s):* Jennifer Kinder, Richard Souza

*Prerequisite(s):* Consent of instructor

*Restrictions:* First-year students in the PhD in Rehabilitation Science program

*Activities:* Lab science

Students investigate a regional of human anatomy with direct relevance to their area of research interest. Course includes mentored cadaveric dissection, radiological imaging, ultrasound imaging, focused study of embalmed material. Goals are to gain a deep understanding of the region of interest and to relate the knowledge to studies in the Musculoskeletal Biomechanics or Clinically Informed Neuroscience tracks. Example foci are lower limb joints, nerve paths, spinal cord in situ.

**School:** Graduate Division

**Department:** Rehabilitation Science Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** Yes

**Course Grading Convention:** P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**Graduate Division course:** Yes

**Is this a web-based online course?** No

**Is this an Interprofessional Education (IPE) course?** No

**May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course?** Yes

**Repeat course for credit?** No

## **REHAB SCI 203 Doctoral Colloquium (1 Units) Fall, Winter, Spring**

*Instructor(s):* Richard Souza

*Prerequisite(s):* Instructor approval

*Restrictions:* Students in the PhD in Rehabilitation Science program

*Activities:* Lecture

Forum to discuss current research of students and faculty members, practice influence on research, translation of research to practice. Topics: professional development, including manuscript reviews; selection of journals for publication of one's work; ethical decisions in publication, grant review, authorship; participation in professional organizations; best practices in teaching, research decisions, collaborations, mentoring; scholarship and funding opportunities, strategies, and decisions.

**School:** Graduate Division

**Department:** Rehabilitation Science Program

**May the student choose the instructor for this course?** No

**Does enrollment in this course require instructor approval?** Yes

**Course Grading Convention:** P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**Graduate Division course:** Yes

**Is this a web-based online course?** No

**Is this an Interprofessional Education (IPE) course?** No

**May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course?** Yes

**Repeat course for credit?** Yes

## **REHAB SCI 204 Application of Principles of Learning (3 Units) Fall, Winter, Spring**

*Instructor(s):* Staff

*Prerequisite(s):* REHAB SCI 201, REHAB SCI 200A, REHAB SCI 200B, REHAB SCI 200C

*Restrictions:* PhD in Rehabilitation Science students

*Activities:* Lecture, Workshop

Required instructional course in rehabilitation science problem-solving; taught by faculty members in the DPT program and other departments at UCSF. The course is designed to strengthen students' understanding of the foundations of rehabilitation science and research knowledge, introduce effective teaching strategies, and improve problem-solving skills by providing the opportunity to serve as teaching assistants in various courses.

**School:** Graduate Division

**Department:** Rehabilitation Science Program

**May the student choose the instructor for this course?** Yes

**Does enrollment in this course require instructor approval?** No

**Course Grading Convention:** P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)

**Graduate Division course:** Yes

**Is this a web-based online course?** No

**Is this an Interprofessional Education (IPE) course?** No

**May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course?** Yes

**Repeat course for credit?** No

## REHAB SCI 205 Biomechanics of Human Motion (2 Units) Spring

*Instructor(s):* Richard Souza  
*Prerequisite(s):* REHAB SCI 201

Restrictions: Limited to Rehabilitation Science students

Activities: Lecture, Project

This course introduces students to the concepts of mechanics as they apply to human motion. The primary areas of study include anthropometry, kinematics, kinetics, muscle function, and muscle modeling, placing emphasis on the biomechanics of locomotion using the inverse dynamics approach for calculating moments of force and joint power.

**School:** Graduate Division  
**Department:** Rehabilitation Science Program  
**May the student choose the instructor for this course?** No  
**Does enrollment in this course require instructor approval?** No  
**Course Grading Convention:** P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)  
**Graduate Division course:** Yes  
**Is this a web-based online course?** No  
**Is this an Interprofessional Education (IPE) course?** No  
**May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course?** Yes  
**Repeat course for credit?** No

## REHAB SCI 206 Journal Club (1 Units) Fall, Winter, Spring

*Instructor(s):* Richard Souza  
*Prerequisite(s):* Instructor Approval

Restrictions: Students in the PhD in Rehabilitation Science Program

Activities: Lecture

Designed for PhD students in Rehabilitation Science to explore literature across the spectrum of biomedical sciences. Students will be assigned articles to read and present at meetings attended by students, postdocs, faculty and staff. Students will be expected to read articles outside of class time and come prepared with clear and succinct evaluation about each article. Faculty leads will provide feedback on article evaluation and work with students to hone their literature evaluation skills.

**School:** Graduate Division  
**Department:** Rehabilitation Science Program  
**May the student choose the instructor for this course?** No  
**Does enrollment in this course require instructor approval?** Yes  
**Course Grading Convention:** P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)  
**Graduate Division course:** Yes  
**Is this a web-based online course?** No  
**Is this an Interprofessional Education (IPE) course?** No  
**May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course?** Yes  
**Repeat course for credit?** Yes

## REHAB SCI 250 Research (0.5-8 Units) Fall, Winter, Spring

*Instructor(s):* Staff  
*Prerequisite(s):* Instructor approval

Restrictions: PhD in Rehabilitation Science students

Activities: Lab science

Students conduct research projects under guidance of faculty member. Projects must be approved by both the research mentor supervising the student and the program director. Students may initiate or become involved in established research programs under faculty guidance.

**School:** Graduate Division  
**Department:** Rehabilitation Science Program  
**May the student choose the instructor for this course?** Yes  
**Does enrollment in this course require instructor approval?** Yes  
**Course Grading Convention:** P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)  
**Graduate Division course:** Yes  
**Is this a web-based online course?** No  
**Is this an Interprofessional Education (IPE) course?** No  
**May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course?** Yes  
**Repeat course for credit?** Yes

## REHAB SCI 290 Rehabilitation Science Related Studies (0 Units) Fall, Winter, Spring, Summer

*Instructor(s):* Richard Souza  
*Prerequisite(s):* None

Restrictions: None

Utility course; for departmental use only.

**School:** Graduate Division  
**Department:** Rehabilitation Science Program  
**May the student choose the instructor for this course?** No  
**Does enrollment in this course require instructor approval?** No  
**Course Grading Convention:** P/NP (Pass/Not Pass) or S/U (Satisfactory/Unsatisfactory)  
**Graduate Division course:** Yes  
**Is this a web-based online course?** No  
**Is this an Interprofessional Education (IPE) course?** No  
**May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course?** Yes  
**Repeat course for credit?** Yes