SAN DIEGO STATE UNIVERSITY
SCHOOL OF EXERCISE AND NUTRITIONAL SCIENCES
GRADUATE STUDIES 2016-2017

“The School of Exercise and Nutritional Sciences is a community of faculty, students, and staff who promote health and fitness as well as the rehabilitation of those with injury, illness, disease, or disability. It seeks to serve as a nationally recognized center for professional and academic training within an environment that emphasizes scientific inquiry, discovery, and application. To do so, the school aims to provide high-quality, innovative education to graduate and undergraduate students in exercise, nutrition, and rehabilitation sciences. We strive to create a generation of leaders who contribute to the health, well-being, and rehabilitation of local, national, and international communities.”

Application Procedures & Deadlines

2017 Fall admission (no spring admission) Application opens- October 1st, 2016

1. Submit the California State University Online Application available via www.csumentor.edu by 15 December 2016
   Application fee: $55. You will then be directed to SDSU Decision Desk for our online application.

2. Have official test scores sent to SDSU by 12 January 2017
   SDSU institution code: 4682
   GRE scores and TOEFL (if applicable) should be sent directly using above code

3. Send official transcripts to SDSU Enrollment Services (see address below) by 12 January 2017
   One set of official transcripts from all institutions attended (except SDSU, if applicable)

4. Upload via Decision Desk (instructions provided on Decision Desk website) by 12 January 2017
   ▪ unofficial copies of bachelor’s degree transcripts and any transcripts where relevant coursework was taken
   ▪ copies of GRE (and if applicable, TOEFL) test scores
   ▪ the names and email address of two references, who will be invited to complete a recommendation electronically
   ▪ a personal statement of your background, research interests/experiences, and professional goals
   ▪ pre-requisite grade sheet
   ▪ optional materials, indicated via SDSU Decision Desk prompt

5. dates to be announced

Meet the ENS Graduate Advising Team

ENS Graduate Adviser
Denise Lebsack, PhD, ATC

ENS Graduate Assistant Advisers
Brooke Wickman, B.S.

Current advising hours:
http://ens.sdsu.edu/student-resources/advising/meet-your-adviser/

SDSU Enrollment Services
Graduate Admissions Document Processing Unit
5500 Campanile Drive
San Diego, CA 92182-7416

Graduate Adviser
Denise Lebsack, PhD, ATC
SDSU School of Exercise & Nutritional Sciences, Room 357
5500 Campanile Drive
San Diego, CA 92182-7251
Meet our Faculty

**Harsimran Baweja**, Assistant Professor, P.T., Ph.D
*University of Florida*
**Teaching areas**: Neurophysiology, Neuroscience  
**Research interests**: Neurophysiology of aging and development, movement lateralization, neuro-rehabilitation

**Michael Buono**, Professor, Ph.D.  
*University of Arizona*
**Teaching areas**: Human Physiology, Pathophysiology, Exercise Physiology  
**Research interests**: environmental physiology, thermoregulation, exercise biochemistry

**Daniel Cannon**, Assistant Professor, Ph.D.  
*University of Leeds (UK)*
**Teaching areas**: Measurements and Evaluations in Kinesiology  
**Research interests**: exercise intolerance, skeletal muscle energy supply and chronic illness, skeletal muscle dysfunction in effective prevention and rehabilitation strategies

**Antoinette Domingo**, Assistant Professor, PT, Ph.D.  
*University of Michigan*
**Teaching areas**: Biomechanics, Geriatrics  
**Research interest**: locomotor rehabilitation, rehabilitation robotics, motor learning and control of balance & gait after neurological injury

**Daniel Goble**, Assistant Professor, Ph.D.  
*University of Michigan*
**Teaching areas**: Biomechanics of Human Movement, Human Motor Control, Sensori-motor Neuroscience  
**Research interests**: proprioceptive ability in health and aging, balance dysfunction, neuroimaging

**Sara Gombatto**, Assistant Professor, PT, Ph.D.  
*Washington University in St. Louis*
**Teaching areas**: Evidence-Based Practice, Research, and Biomechanics  
**Research interests**: movement characteristics of individuals with spinal pain, using 3D motion capture and MRI

**Mee Young Hong**, Associate Professor, Ph.D.  
*Texas A & M University*
**Teaching areas**: Advanced Nutrition laboratory, Child Nutrition  
**Research interests**: nutrition (dietary fat and phytochemicals) effects on inflammation, CVD & cancer

**Shirin Hooshmand**, Assistant Professor, Ph.D.  
*Florida State University*
**Teaching areas**: Advanced Nutrition and Geriatric Nutrition  
**Research interests**: functional foods, bone, osteoporosis and osteoarthritis

**Mark Kern**, Professor, Ph.D., R.D.  
*Purdue University*
**Teaching areas**: Sports nutrition, energy balance, advanced nutrition  
**Research interests**: exercise and nutrition, nutrition and chronic disease

**Katrina Maluf**, Professor, Ph.D., PT  
*Washington University, St. Louis*
**Teaching areas**: Clinical reasoning, psychosocial aspects of rehabilitation  
**Research interests**: chronic pain, psychosocial stress, motor control & rehabilitation

**Jochen Kressler**, Assistant Professor, Ph.D.  
*University of Miami*
**Teaching areas**: Applied Kinesiology  
**Research interests**: cardiovascular and metabolic adaptations with exercise and nutritional manipulations and the molecular mechanisms underlying these changes

**Fred Kolkhorst**, Professor, Ph.D.  
*University of Missouri, Columbia*
**Teaching areas**: Exercise Physiology  
**Research interests**: VO2 kinetics, muscle oxygen saturation

**Denise Lebsack**, Associate Professor, Ph.D., ATC  
*University of Virginia*
**Teaching areas**: Athletic Training, Pre-physical therapy  
**Research interests**: functional performance and aging, athletic training education

**Susan Levy**, Professor, Ph.D.  
*Oregon State University*
**Teaching areas**: Measurement & evaluation, Statistics, Research Methods, Physical Activity Promotion  
**Research interests**: Motivational factors & health related outcomes in exercise and physical activity, measurement of physical activity

**Mitchell J. Rauh**, Professor, Ph.D., B.S.P.T, M.P.H.  
*University of Washington*
**Teaching areas**: Evidence-based Practice, Musculoskeletal Therapeutics/Orthopedics, Cardiopulmonary Therapeutics  
**Research interests**: running injuries, Female Athlete Triad, sports injury epidemiology, functional-based tests for clinical assessment

**Roger Simmons**, Interim Director, Ph.D., Professor Emeritus, FERP  
*Retired*
*University of Iowa*
**Teaching areas**: Motor Control, Motor Learning  
**Research interests**: balance control; motor programming; timing parameters of voluntary movement

**Lori Tuttle**, Assistant Professor, Ph.D., PT  
*Washington University (St. Louis)*
**Teaching areas**: Case Student Presentations, Acute Care Physical Therapy  
**Research interests**: Women’s Health, pelvic floor muscle function & rehabilitation
**Frequently Asked Questions**

**What type of degree do I need to apply?**
B.S. or B.A., although it does not need to be in related field as long as all prerequisite courses are completed (see question below).

**Do I have to finish all prerequisite courses listed before admission to the degree program?**
Priority consideration will be given to those students with all prerequisites fulfilled. Students not meeting all prerequisites can be recommended for conditional admission by approval of the faculty; however, all prerequisites must be completed in the first year of graduate study. Students lacking any prerequisites noted with an * will not be accepted on a conditional basis.

**How do I know if the classes I’ve taken count as prerequisites or not?**
If you are currently attending a university and believe you have fulfilled the prerequisite courses, you will need to send an email to the graduate advising office containing the name of the school, course name, credit hours, any prerequisites for the course, and course(s)’ description from the syllabus or catalog; and which prerequisite you believe it meets. If you will be attending school in California, you can check on [www.assist.org](http://www.assist.org) to see if the classes you took will fulfill our requirements. If you cannot find your school on the assist.org web-site, we can evaluate it via e-mail as noted above.

**What is the minimum GPA to apply?**
3.0 overall or in last 60 units of bachelor’s coursework.

**What are the minimum GRE scores I need to apply?**
Verbal score ≥151 (or 475 for old test) and Quantitative score ≥142 (or 475 for old test). The writing section must also be completed and may be considered for program application.

**How recent must my GRE scores be?**
GRE scores do not “expire.” Hard copies of official scores can also be accepted if scores are not available in an online format.

**What if I’m a foreign applicant?**
A TOEFL ≥550 paper test (or 213 computer test) is required. Minimum score for iBT is 80 (or 550 for paper test). Scores must be no more than two years old. Questions regarding international student admission should be directed to [intl_admissions@sdsu.edu](mailto:intl_admissions@sdsu.edu). Or visit: [http://www.isc.sdsu.edu/](http://www.isc.sdsu.edu/)

**Who has to take the TOEFL?**
All graduate and post-baccalaureate applicants, regardless of citizenship, whose native language is not English and whose preparatory education was principally in a language other than English must demonstrate competence in English. Those applicants who do not possess a bachelor's degree from a postsecondary institution where English is the principal language of instruction must submit official TOEFL or IELTS results

**Do California residents get admission preference?**
Yes, San Diego State University is a State school; therefore preference is given to residents of the State of California. However, this does not imply that California residents receive automatic acceptance. Admission to ENS master’s programs is competitive and all completed applications are processed. Consequently, several out-of-state students receive admission into our programs.

**How is my residency status determined?**
California residency of graduate students is in accordance with the regulations of the Board of Regents and the laws of the State of California. A full statement of the regulations is available in the SDSU Graduate Bulletin. Out-of-state residents must pay the out-of-state graduate student tuition rate. Please visit [http://arweb.sdsu.edu/es/registrar/residency.html](http://arweb.sdsu.edu/es/registrar/residency.html) for more detailed information on residency classification for tuition purposes.

**Who writes my letters of recommendation and is there a form he/she needs to fill out?**
Letters can be from professionals in academic or professional areas. You will be prompted to provide the names and email addresses of recommenders on the SDSU Decision Desk application. Letters will be uploaded by the recommenders to the SDSU Decision Desk online portal.

**What should I include in my Statement of Purpose? How long should it be?**
Statements should be 1-2 pages describing applicant’s background, research interests/experiences, and goals relevant to degree being sought. While you may include your Statement of Purpose with your CSUmentor application, you will also be prompted to upload your Statement of Purpose into the SDSU Decision Desk platform. You have the option to indicate in that section of the CSUmentor, “Statement sent directly to the department via SDSU Decision Desk”.

**When will I know if I’m accepted?**
Admission decisions will appear on your Webportal account in the weeks following the deadline. Email notification will also be provided by the ENS department.

**If I’m accepted, when would I begin my master’s coursework in the program?**
The Fall of the year in which you were offered an acceptance.

**Are GA (Graduate Assistantships) or TA (Teaching Associateships) available?**
Yes, ~15 GA/TA positions are awarded per semester.

**How do I apply for a GA/TA position?**
GA/TA applications are available on Decision Desk should be uploaded via the SDSU Decision Desk site.
Frequently Asked Questions (cont.)

How competitive are the programs?
Our graduate programs are becoming increasingly competitive with many qualified applicants vying for a limited number of spots. In 2015, our applicants had the following average GPAs:

- Kinesiology-Applied Movement Science - 3.46
- Exercise Physiology - 3.51
- Nutritional Sciences - 3.68
- Dual (Exercise Physiology and Nutritional Sciences) - 3.61

Are there research opportunities in the program?
Yes, our students engage in a variety of research projects during their time in the program. Many students team up with faculty members or get involved with community-based projects as well.

Can I apply for more than one program?
No, you may only apply for one SDSU graduate program, including our Doctorate of Physical Therapy program.

When does the application open?
October 1st.

Can I enroll in classes at SDSU prior to acceptance?
Contact the Office of Extended Studies for information on Open University for taking pre-requisite classes prior to acceptance. Please see Graduate Advisor if, upon acceptance, you wish to take prerequisite classes at SDSU the summer prior to your start date.

Can I apply for the Didactic Program in Dietetics (DPD) too?
It is possible to complete the DPD coursework along with M.S. in Nutritional Sciences or Dual M.S. in Exercise Physiology and Nutritional Sciences. Please visit: http://ens.sdsu.edu/academic-programs/dpd/admissions/ for more information.

How big is the ENS graduate department?
There are approximately 70 active graduate students enrolled in our four programs.

Do I have to complete a thesis?
There is an option to complete a Directed Readings, which is an alternative to a thesis project. The Directed Readings course offers students several options for completing the research requirement, including a manuscript submission.

How much does it cost to attend SDSU?
- California resident fees: $8,242 per year (full-time student) (02/16).
- Non-resident fees: $8,242 plus $372 per credit unit (02/16).
For more tuition information, please visit: http://bfa.sdsu.edu/fm/co/sfs/money/Spring2016MoneyMatters.pdf

Is Financial Aid available? How do I apply for Financial Aid?
The SDSU Financial Aid office can discuss information regarding specific financial aid options. Please contact the Financial Aid Office at (619) 594-6323 or http://go.sdsu.edu/student_affairs/financialaid/ for more specific information.

Are scholarships available? How do I apply for them?
There are scholarships available especially for ENS students. For more information, please visit: http://go.sdsu.edu/student_affairs/financialaid/sdsuscholarshipshowtosearch.aspx

How long does it take to complete the degree?
Length of program is 2 years (3 years for Dual M.S.). You must complete your degree in no more than 7 years.

Does the ENS department offer doctoral degrees?
We offer a clinical doctorate in Physical Therapy. There are no PhD or other doctorate programs in our department at this time.

Can I visit before I come?
Visits are encouraged and can be arranged via email: ensgrad@mail.sdsu.edu. Please visit the Office of Prospective Students to arrange a campus tour: http://arweb.sdsu.edu/es/admissions/tours_events/index.html

Have other questions?
Email: ensgrad@mail.sdsu.edu
Phone: (619) 594-5979
In person: ENS Building, Room 357
M.S. KINESIOLOGY-APPLIED MOVEMENT SCIENCE

The purpose of this specialization is to provide students with further knowledge of the anatomy, mechanics and neuromotor control of normal and abnormal movement, as well as injury and rehabilitation. Emphasis in required coursework is on understanding measurement and the scientific bases of body structure and function with particular reference to health related concerns and prevention of injuries in sport and exercise. 36 units.

**Undergraduate Prerequisite Coursework or Equivalent**
- Human Anatomy (BIOL 212)*
- Human Physiology (BIOL 261 or 336)*
- Biomechanics (ENS 306)*
- Physiology of Exercise (ENS 304)
- Motor Learning and Performance (ENS 307)
- Statistics (e.g., PSY 280)*

* Class must be completed prior to admission

**Required Courses (24 units)**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENS 601</td>
<td>Experimental Methods in ENS</td>
<td>3</td>
</tr>
<tr>
<td>ENS 602</td>
<td>Research Evaluation in ENS</td>
<td>3</td>
</tr>
<tr>
<td>ENS 610</td>
<td>Biomechanics: Measurement Tech. I – Kinematics</td>
<td>3</td>
</tr>
<tr>
<td>ENS 611</td>
<td>Biomechanics: Measurement Tech. II – Kinetics</td>
<td>3</td>
</tr>
<tr>
<td>ENS 612</td>
<td>Biomechanics: Measurement Tech. III – EMG</td>
<td>3</td>
</tr>
<tr>
<td>ENS 613</td>
<td>Motor Control and Rehabilitation Science</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 570</td>
<td>Neurobiology</td>
<td>3</td>
</tr>
<tr>
<td>ENS 799A</td>
<td>Thesis</td>
<td>3</td>
</tr>
<tr>
<td>ENS 790</td>
<td>Directed Readings</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives (12 units) selected in consultation with faculty advisor.**

Area Faculty:
- Harsimran Baweja (594-1312; hbaweja@mail.sdsu.edu)
- Antoinette Domingo (594-3289; adomingo@mail.sdsu.edu)
- Daniel Goble (594-7272; dgoble@mail.sdsu.edu)
- Sara Gombatto (594-3288; sgombatto@mail.sdsu.edu)
- Katrina Maluf (594-5552; kmaluf@mail.sdsu.edu)
- Susan Levy (594-5672; slevy@mail.sdsu.edu)
- Mitch Rauh (594-3706; mrauh@mail.sdsu.edu)
- Lori Tuttle (594-1918; ltuttle@mail.sdsu.edu)

M.S. EXERCISE PHYSIOLOGY

The role of exercise in health, aging, and disease prevention and rehabilitation is studied by providing in-depth theoretical knowledge and practical experiences related to the field. Students are prepared for preventive and/or rehabilitative certification from the American College of Sports Medicine, and for continued graduate study toward a Ph.D. degree. 36 units.

**Undergraduate Prerequisite Coursework or Equivalent**
- Human Anatomy (BIOL 212)*
- Human Physiology (BIOL 261 or 336)*
- Physiology of Exercise (ENS 304)*
- Exercise Physiology Lab (ENS 304L)
- Applied Kinesiology (ENS 303)
- Statistics (e.g., PSY 280)*

* Class must be completed prior to admission

**Required Courses (29 units)**

<table>
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<tr>
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<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ENS 601</td>
<td>Experimental Methods in ENS</td>
<td>3</td>
</tr>
<tr>
<td>ENS 602</td>
<td>Research Evaluation in ENS</td>
<td>3</td>
</tr>
<tr>
<td>ENS 632</td>
<td>Physiological Chemistry of Exercise</td>
<td>3</td>
</tr>
<tr>
<td>ENS 661</td>
<td>Seminar in Exercise Physiology</td>
<td>3</td>
</tr>
<tr>
<td>ENS 662</td>
<td>Advanced Exercise Physiology Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>DPT 750</td>
<td>Concepts in Physiology, Pathophys, &amp; Pharma</td>
<td>4</td>
</tr>
<tr>
<td>DPT 830</td>
<td>Cardiopulmonary Therapeutics</td>
<td>4</td>
</tr>
<tr>
<td>ENS 796</td>
<td>Exercise Specialist Internship</td>
<td>3</td>
</tr>
<tr>
<td>ENS 799A</td>
<td>Thesis</td>
<td>3</td>
</tr>
<tr>
<td>ENS 790</td>
<td>Directed Readings</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives (7 units) selected in consultation with faculty advisor.**

Area Faculty:
- Michael Buono (594-6823; mbuono@mail.sdsu.edu)
- Daniel Cannon (594-8283; dcannon@mail.sdsu.edu)
- Fred Kolkhorst (594-1924; fred.kolkhorst@sdsu.edu)
- Jochen Kressler (594-0323; jkressler@mail.sdsu.edu)
M.S. NUTRITIONAL SCIENCES

Students are trained for diverse professional careers in the fields of dietetics, food service management, and food industries. **30 units.**

Undergraduate Prerequisite Coursework or Equivalent
- General Chemistry + Lab (CHEM 100)* ^
- Organic Chemistry (CHEM 130) **
- Biochemistry (CHEM 160) ^
- General Biology + Lab (BIOL 100 & 100L)* ^
- Microbiology (BIOL 211 & 211L) ^
- Human Physiology (BIOL 261 or 336)* ^
- Basic Nutrition (NUTR 201)*
- Food Science + Lab (NUTR 205 & 205L)
- Advanced Nutrition (NUTR 302 & 302L)
- Statistics (e.g., PSY 280)* ^

* Class must be completed prior to admission;
^ Students interested in the DPD program must complete "^" noted courses and a course in Anatomy (BIOL 212) with > 3.6 GPA.

Required Courses (18 units)

ENS 601 Experimental Methods in ENS (3)
ENS 602 Research Evaluation in ENS (3)
NUTR 799A Thesis (3) OR
ENS 790 Directed Readings (3)

Select one of the Nutrition courses below
NUTR 600 Seminar: Foods and Nutrition (3)
NUTR 700 Seminar in Nutrition (3)

Select two of the Nutrition courses below
NUTR 607 Child Nutrition (3)
NUTR 608 Geriatric Nutrition (3)
NUTR 610 Nutrition and Energy (3)

Electives (12 units) selected in consultation with a faculty advisor.

Area Faculty:
Mark Kern (594-1834; kern@mail.sdsu.edu)
Mee Young Hong (594-2392; mhong2@mail.sdsu.edu)
Shirin Hooshmand (594-6984; shooshmand@mail.sdsu.edu)

DUAL M.S. EXERCISE PHYSIOLOGY & NUTRITIONAL SCIENCES

The interrelated roles of exercise and nutrition in health, aging, and disease prevention and rehabilitation are studied by providing in-depth theoretical knowledge and practical experiences. **48 units.**

Undergraduate Prerequisite Coursework or Equivalent
- General Chemistry (CHEM 100)*
- Organic Chemistry (CHEM 130)*
- Biochemistry (CHEM 160)
- Human Anatomy (BIOL 212)*
- Human Physiology (BIOL 261 or 336)*
- Physiology of Exercise (ENS 304)*
- Exercise Physiology Lab (ENS 304L)
- Applied Kinesiology (ENS 303)
- Statistics (e.g., PSY 280)*
- Basic Nutrition (NUTR 201)*
- Advanced Nutrition (NUTR 302 & 302L)

* Class must be completed prior to admission

Required Courses (41 units)

DPT 750 Concepts in Physiology, Pathophys, & Pharm (4)
DPT 830 Cardiopulmonary Therapeutics (4)
ENS 601 Experimental Methods in ENS (3)
ENS 602 Research Evaluation in ENS (3)
ENS 661 Seminar in Exercise Physiology (3)
ENS 662 Advanced Exercise Physiology Laboratory (3)
ENS 796 Exercise Specialist Internship (3)
NUTR 600 Seminar: Foods and Nutrition (3)
NUTR 607 Child Nutrition (3)
NUTR 608 Geriatric Nutrition (3)
NUTR 610 Nutrition and Energy (3)
NUTR 700 Seminar in Nutrition (3)
NUTR 799A Thesis (3) OR
ENS 799A Thesis (3) OR
ENS 790 Directed Readings (3)

Electives (7 units) selected in consultation with a faculty advisor.

Area Faculty:
Michael Buono (594-6823; mbuono@mail.sdsu.edu)
Daniel Cannon- (594-8283; dcannon@mail.sdsu.edu)
Mee Young Hong (594-2392; mhong2@mail.sdsu.edu)
Shirin Hooshmand (594-6984; shooshmand@mail.sdsu.edu)
Mark Kern (594-1834; kern@mail.sdsu.edu)
Fred Kolkhorst (594-1924; fred.kolkhorst@sdsu.edu)
Jochen Kressler- (594-0323; jkressler@mail.sdsu.edu)