ENS 613: MOTOR CONTROL AND REHABILITATION SCIENCE

School of Exercise and Nutritional Sciences
San Diego State University
Spring 2017

Course Particulars

Instructor: Daniel J. Goble, PhD

Meeting time and place: FRI 10:00am-12:40pm; PG-174

Office Hours: By appointment (ENS 313)

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Prerequisites: ENS 307 or equivalent

Course Description

This seminar-based course uncovers the basic neurophysiology underlying human movement through the exploration of common neurological and musculoskeletal disorders. In addition, the capacity for plastic changes during physical rehabilitation will be addressed, as it pertains to the improvement of various movement disorders.

ENS Masters Program Learning Goals

1. Students will demonstrate the ability to critique and interpret germane literature (scientific, clinical, etc.) in the area of rehabilitation.

2. Students will demonstrate an understanding of the principles underpinning clinical rehabilitation.

3. Students will demonstrate an understanding of the unique features of selected pathologies as they relate to therapeutic interventions.

ENS Masters Program Learning Objectives

1. Critically evaluate research abstracts / journal articles in the area of rehabilitation, including methods, results, and discussion.
2. Accurately communicate findings of germane literature, both orally and in writing.

3. Explain the role of auditory, visual, and somatosensory integration in rehabilitation of disabilities in human motion.

**Course Specific Learning Outcomes**

1. Demonstrate knowledge regarding the neurophysiological basis of how a movement is initiated and controlled.

2. Understand common theoretical issues and concepts related to the field of motor control.

3. Develop and present in seminar format an informational talk on a particular aspect of the human sensorimotor system with respect to its dysfunction.

**Tentative Class Schedule**

*Week 1*
Jan 20  Course Overview and Expectations, Assignment of Groups

*Week 2*
Jan 27  Assignment of Topics

*Week 3*
Feb 3  Seminar Development

*Week 4*
Feb 10  Seminar #1 – TBD

*Week 5*
Feb 17  Seminar #2 – TBD

*Week 6*
Feb 24  Seminar #3 – TBD

*Week 7*
Mar 3  Seminar #4 – TBD

*Week 8*
Mar 10  Seminar #5 – TBD

*Week 9*
Mar 17  Seminar #6 – TBD
Week 10
Mar 24  Seminar #7 – TBD

Week 11
Mar 31  Spring Recess

Week 12
Apr 7   Seminar #8 – TBD

Week 13
Apr 14  Meaning of life

Week 14
Apr 21  Study Week

Week 15
Apr 28  Final Exam

Course Evaluation

1. Seminar Presentation  50%
2. Participation         10%
3. Exam                 40%

Grading Scale

A    >92%
A-   90-92%
B+   88-89.9%
B    82-88.9%
B-   80-81.9%
C+   78-79.9%
C    72-77.9%
C-   70-71.9%
D+   68-69.9%
D    62-67.9%
D-   60-61.9%
F    <60%
Statement on Cheating

The University adheres to a strict policy regarding cheating and plagiarism. Students are expected to maintain the highest standards of academic honesty and respect. According to SDSU’s Center for Student Rights and Responsibilities, students may be expelled, suspended, or put on probation for academic dishonesty. In addition to a University review of the incident(s), the School of Exercise and Nutritional Sciences may also take disciplinary action which, depending on the severity of the incident, could result in one or all of the following sanctions: a grade of "F" on the assignment in question, dropping of one letter grade from your final grade in the class, or, for multiple or severe incidents, a grade of "F" in the class. You may receive an incomplete in a class, which will be removed once the investigation of the incident has been completed.

Cheating shall be defined as the act of obtaining or attempting to obtain credit for academic work by the use of dishonest, deceptive, or fraudulent means. Examples of cheating include, but are not limited to (a) copying, in part or in whole, from another’s test or other examination; (b) discussing answers or ideas relating to the answers on a test or other examination without the permission of the instructor; (c) obtaining copies of a test, an examination, or other course material without the permission of the instructor; (d) using notes, cheat sheets, or other devices considered inappropriate under the prescribed testing condition; (e) collaborating with another or others in work to be presented without the permission of the instructor; (f) falsifying records, laboratory work, or other course data; (g) submitting work previously presented in another course, if contrary to the rules of the course; (h) altering or interfering with the grading procedures; (i) plagiarizing, as defined below; and (j) knowingly and intentionally assisting another student in any of the above.

Plagiarism shall be defined as the act of incorporating ideas, words, or specific substance of another, whether purchased, borrowed, or otherwise obtained, and submitting same to the University as one’s own work to fulfill academic requirements without giving credit to the appropriate source. Plagiarism shall include but not be limited to (a) submitting work, either in part or in whole, completed by another; (b) omitting footnotes for ideas, statements, facts, or conclusions that belong to another; (c) omitting quotation marks when quoting directly from another, whether it be a paragraph, sentence, or part thereof; (d) close and lengthy paraphrasing of the writings of another; (e) submitting another person’s artistic works, such as musical compositions, photographs, paintings, drawings, or sculptures; and (f) submitting as one’s own work papers purchased from research companies.

Examples of Plagiarism include but are not limited to:

- Using sources verbatim or paraphrasing without giving proper attribution (this can include phrases, sentences, paragraphs and/or pages of work)
• Copying and pasting work from an online or offline source directly and calling it your own
• Using information you find from an online or offline source without giving the author credit
• Replacing words or phrases from another source and inserting your own words or phrases
• Submitting a piece of work you did for one class to another class

If you have questions on what is plagiarism, please consult the policy.

Statement for Students with Disabilities

If you are a student with a disability and believe you will need accommodations for this class, it is your responsibility to contact Student Disability Services at (619) 594-6473. To avoid any delay in the receipt of your accommodations, you should contact Student Disability Services as soon as possible. Please note that accommodations are not retroactive, and that accommodations based upon disability cannot be provided until you have presented your instructor with an accommodation letter from Student Disability Services. Your cooperation is appreciated.

Disclaimer

Every effort will be made to follow the syllabus content and schedule; however, if circumstances dictate there may be modifications necessary during the semester. If such is the case the professor will make every effort to notify students in a timely manner.