

HP/W 480 Exercise Programming for Special Populations – Spring 2018
School of Health Promotion and Human Development
University of Wisconsin – Stevens Point

Lecture: Wednesdays - 4:30 - 7:00 pm, CPS 229

A. INSTRUCTOR INFORMATION:

Instructor: Corey J. Huck, Ph.D., C.S.C.S.
Office: College of Professional Studies, Room 101
Phone: 346-2515
Email: corey.huck@uwsp.edu
Office Hours: by appointment

B. REQUIRED TEXT:

Durstine, L. J. & Moore, G.E. ACSM's Exercise Management for Persons with Chronic Diseases and Disabilities. Human Kinetics, Champaign, IL. 2003 (4th Edition).

Various journal articles (original research from reputable, peer-reviewed journals) posted on D2L.

C. COURSE DESCRIPTION:

A course developed to address issues related to the appropriation of health interventions (specific physical activity and/or exercise programs) for special populations, including but not limited to: older adults, children, obesity, diabetes, CVD, cancer, anxiety, depression, osteoporosis, multiple sclerosis, COPD, PAD, arthritis & musculoskeletal injuries. Basic principles of exercise programming for optimal health of the general population will briefly be reviewed. Evidence-based, advanced programming methods and population-specific considerations will be discussed. It is important for teachers of Physical Education; Athletic Trainers, Dietitians, and Health Science and Promotion professionals have a full understanding of how to utilize effective exercise programs to promote optimal health for those with specialized conditions and/or disease states.

Prerequisites: HP/W 312 or instructor's approval.

D. COURSE FOCUS & OBJECTIVES

Students will understand that:

- The physiology of disease states and the aging process impact the capacity of individuals to participate in exercise training (considerations for safety and efficacy).
- Exercise programming for special populations is guided by evidence-based principles of training to reduce disease-specific conditions and/or improve quality of life.
- There are diverse psychological, social, and ethical considerations in using specialized exercise training strategies and programs.
- Continual self-directed learning will encourage commitment to professional growth and development.

Essential Questions:

- How can specific populations be encouraged to meet the guidelines for physical activity and/or exercise?
- With limited time and resources, what exercise strategies/programs are the most appropriate for specialized populations?
- Why is aerobic exercise utilized in special populations more often than anaerobic/resistance exercise strategies?

LEARNING OUTCOMES

Knowledge: students will and can...

- Explain how evidence-based, lifestyle modifications (including exercise prescription) can be utilized to address the health needs of various “special” populations.
- Identify and access appropriate exercise strategies to design effective training programs for specific populations.

Skills: students will and can...

- Distinguish between credible research articles and articles written for the popular press.
- Apply knowledge of exercise prescription (principles, modalities, efficacy, and safety) to develop an effective 12-week training program.
- Prepare and present a research paper describing the aforementioned exercise program design to justify and defend its effectiveness for a specified population.

Dispositions: students will and can...

- Value the diverse psychological, social, and ethical considerations of exercise programming for special populations.
- Choose to commit to their professional growth and development as leaders in the health field.

E. GRADES:

Exam 1	10%	A = $\geq 93\%$	A- = 90%		
Exam 2	10%	B+ = 87%	B = 83%	B- = 80%	
Online Final Exam	20%	C+ = 77%	C = 73%	C- = 70%	
Research Paper	25%	D+ = 67%	D = 60%		
Student Presentation	15%	F = $< 60\%$			
Homework/ Quizzes/ Participation	20%	(indicates lowest percentage to attain letter grade)			

F. HANDOUTS:

Power Point presentations, handouts, and extra reading material, will be placed in public folders on D2L. Occasionally I may hand out material in class, if you miss that day of lecture get the material from another student. Please do not ask me to provide you with copies of missed lecture material or handouts. *[Make a friend in the class and if you miss class, ask them what you missed – not me!]*

G. HOMEWORK ASSIGNMENTS:

- All students will be expected to read assigned handouts, articles, and class material for each lecture. Students will be graded on class participation and scholarly discussion; therefore attendance is mandatory to receive these points.
- Graduate students are expected to read additional materials provided by the instructor and discuss, synthesize, and critique the major findings to present during in-class discussions.
- Graduate students will be assigned an additional assignment:
 - Find one scholarly article (peer-reviewed original research) for 2 class topics
 - Schedule a time to meet with the instructor to obtain approval for the articles
 - Provide a PDF of the articles to be posted on D2L at least 1 week prior to class discussion of the topic
 - Facilitate a class discussion (10 minutes per article): rubric for facilitation will be provided.

H. Interview Summary Paper:

Complete the following steps, **total 100 pts**:

1. Finding 3 acceptable, original research articles and bring to class in **APA format by 2/14, (5 points)**.
2. Write a 1 paragraph summary of your articles and present to the class, 3-minutes. **2/21, (10 points)**.
3. Be present for the in-class training on how to conduct interviews. **4/4, (10 points)**
4. Schedule and conduct an interview (with video recording) with a person with special considerations. **(10 points)**
 - o Schedule and conduct interview the week of **April 11th**
5. Type out (transcribe) the full interview, including your questions and statements. **4/25, (15 points)**
6. Complete the summary paper by including 3 themes: paper is due **5/3, (50 points)**
 - o The story of the person, the condition(s), and portrayal of daily life
 - o Outline of the most important or common themes from the interview. The outline should be structured by each dimension of wellness.
 - o Your reflection on what you've learned during this experience (1 page minimum)
7. Complete summary paper by adhering to the following criteria:
 - o Double-spaced
 - o 12 point font, Times New Roman
 - o 1-inch page margins

I. STUDENT PRESENTATION: 5/2 -50 points each

8. You will be presenting on your interview summary paper, #6 from above. **15-20 minutes each**
 - Sharing the story (case study)
 - o Possibly include pictures or newspaper clippings from the subjects
 - Most important and common themes
 - What you've learned from this experience
 - Additional discussion

J. READING AND PARTICIPATION:

Assigned reading material from the text (or accessory material) is required! To be successful in this course, it is advisable to complete assigned readings prior to covering the material in class. Exam questions may cover material from assigned readings drawn directly from the text or assigned research articles. Therefore, reading the text and accessory material will be essential in obtaining a high grade in the class.

Participating in lecture is an important aspect of this class! Aside from this competency accounting for 20% of your final grade, participation and class discussion stimulate active learning. Furthermore, each student brings a unique personality and life experience, so sharing and quality critical thinking make the class much more enjoyable. At the end of the semester I may award an upward grade curve for those students who participate more often.

K. ATTENDANCE:

Attendance for lecture is not required but it is **strongly recommended**. **You cannot obtain points for in class participation if you are not in class that day. There are no exceptions or make-ups for these points. I will be awarding points for participation in class!** Students who attend lecture typically score higher on exams as well.

During lectures, please turn off all electronic devices including cell phones, pagers, i-pods, MP3 players, etc., with the exception of personal laptop computers!

L. DISABILITIES, RELIGIOUS BELIEFS and ACADEMIC INTEGRITY:

- Students with disabilities should contact the Office of Disability Services during the first two weeks of the semester if they wish to receive accommodation.
- Religious beliefs will be accommodated according to UWS 22.03 as long as you notify me within the first three weeks of the beginning of classes of the specific date(s) you request relief from an examination or academic requirement
- Academic integrity is important. Please see information on student academic misconduct in the Community Rights and Responsibilities booklet (See <http://www.uwsp.edu/centers/rights/> specifically UWSP 14.03)

Secondary Sources Available:

1. Thomas, J.R., & Nelson, J.K. Research Methods in Physical Activity. Human Kinetics, Champaign, IL. 2001.
2. Gould, B.E. Pathophysiology for the Health Professional. W.B. Saunders Company, Philadelphia, PA. 2002.
3. Griffin, J.C. Client-Centered Exercise Prescription. Human Kinetics, Champaign, IL. 2006.
4. ACSM's Resource Manual for Guidelines for Exercise Testing and Prescription, Fourth Edition. Lippincott Williams & Wilkins, Philadelphia, PA. 2001.
5. Publication Manual of the American Psychological Association, Fifth Edition. American Psychological Association, Washington, DC. 2005.

Sources Available at the Library:

1. Mackinnon, Laurel. Exercise Management. Human Kinetics, 2003.
2. Swain, D.P. Exercise Prescription: A case study approach to the ACSM Guidelines. Human Kinetics, 2007.
3. Heyward, Vivian. Advanced Fitness Assessment and Exercise Prescription. Human Kinetics, 2006.
4. Fleck, S.J. & Kraemer, W.J. Designing Resistance Training Programs, 3rd Edition. Human Kinetics, 2004.
5. Colwel, John. Diabetes. Hanley and Belfus, 2003
6. Goldstein, Barry. Type 2 Diabetes: Principles and Practice 2nd Edition. CRC Press, 2007.
7. Farraye, Francis A. Bariatric Surgery: A Primer for your Medical Practice. SLACK Inc., 2006.
8. Okie, Susan. Fed Up! Winning the War Against Childhood Obesity. National Academic Press, 2005.
9. Schneider, Carole. Exercise and Cancer Recovery. Human Kinetics, 2003.
10. Briner, William W. Action Plan for Allergies. Human Kinetics, 2007.
11. Millar, Lynn A. Action Plan for Arthritis. Human Kinetics, 2003.
12. Barnes, Darryl. Action Plan for Diabetes. Human Kinetics, 2004.
13. Divine, Jon G. Action Plan for High Blood Pressure. Human Kinetics, 2006.
14. Durstine, Larry J. Action Plan for High Cholesterol. Human Kinetics, 2006.
15. Bushman, Barbara. Action Plan for Menopause. Human Kinetics, 2005.
16. Brill, Patricia A. Functional Fitness for Older Adults. Human Kinetics, 2004.

L. THEORETICAL SCHEDULE

Date of Class	Homework/Class Preparation	In Class Material/Activity
1/24	syllabus	Syllabus, course overview and expectations 23.5 hours - Video Discussion Introduction Spec Pops Presentation Fitness Testing
1/31	Text Chap. 1, 2 Read Article, watch video	Health benefits of PA, Exercise Prescription Research Methods Research/Interview Project
2/7	Text Chap. 3,4, 2008 PA Guidelines for US, prepare questions for guest presenters who work with older adults	Older adults (aging process), <u>ADRC Presenters @ 6:20pm</u>
2/14	Text Chap 5, 6, Article, prepare questions	Osteoporosis, BEST program discussion Arthritis, low back pain, joints, Article discussion <u>John Munson (Bionic Man Story) 4:30-5:15</u>
2/21	Article "through the eyes of children" Submit original research articles for Lit Review	Age-specific programs (children and youth) Review Programs, Article Discussion <u>YMCA & Pacelli Youth Programming Guests 5:30-6:30</u>
2/28	Study for exam	4:30-5:00 Intro to Interviewing Guest Presenter (5:00-6:00) EXAM 1 (6-7pm)
3/7	Chap 10,16,17,18 Read the article	CVD Risk Factors, Hypertension Pulmonary Dis. (COPD, Asthma, Cystic Fibrosis) <u>Article Discussion</u>
3/14	Chap 6, 10 prepare questions for Kelly on Cardiac Rehab and working with that population	Cardiovascular Dis. (MI, Ischemia, CHF) CardioPulmonary Rehab <u>Kelly Shields @ 5 pm</u>
3/28	Text Chap. 6, prepare questions	Diabetes and Hyperlipidemia Diabetes video, Morbid Obesity <u>DPP program and participant</u>
4/4	Study for the exam	Interview skills development EXAM 2
4/11	Text Chap 8, 22 Article, questions	Immunological/Hematological Disorders (Cancer, CFS) Article Discussion <u>Cancer Survivors from Livestrong</u>
4/18	Text Chap 25, 28, 29, 31 and 32 questions	Mental Health (Depression & Anxiety), Video Neuromuscular Disorders (Stroke, MS, Parkinson's) <u>Stroke Survivor Panel 5:30-6:30</u>
4/25	Paper/Presentation work	Submit transcription of interviews by 4/25, No official class, prepare summary papers/presentations
5/2	Interview Papers Due, Presentations	class student presentations
5/9	Presentations, Study for final exam	Student presentations, course summary, online class evaluations, final