HP/W 430: Advanced Practicum in Health Promotion and Wellness (3 cr.) Section 2 – Exercise & Nutrition Practicum Spring 2019

A. General Information

Instructor:	Thomas Wetter, Ph.D.
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Office Hours:	T & R 10:00-11:30, and by appt.

Class Time: Thursday 12-1:50; Additional hours for Healthy American health and fitness assessment times will be assigned; client assessment and programming times will be scheduled mutually between you and your client. Additional hours of assessment technique training may be required in the first 4 weeks of the semester.

Location: HEC 033 (Health and Human Performance Lab)

Cardio Center Membership: 1/2 cost covered by HPHD dept., 1/2 discounted from Cardio Center

B. Texts & Other Resources

Text Rental

- American College of Sports Medicine. Guidelines for Exercise Testing and Prescription. 9th ed.; 2014.
- ACSM's Certification Review. 4th ed. 2014

Online Resources

- Printable resources at <u>https://www.choosemyplate.gov/</u> especially https://www.choosemyplate.gov/health-professionals
- <u>https://health.gov/</u>

Optional

- There are a number of texts on personal training and exercise prescription at the library; several have been placed on reserve (see Appendix B)
- Dr. Wetter has a boatload of additional texts, just ask

C. Objectives

- Through the testing of Healthy American students, you will be able to:
 - Demonstrate technically accurate health/fitness testing skills.
 - Explain the physiologic rationale for each test and its relationship to health.
 - Explain individual test results and suggest strategies for improvement.
 - o Demonstrate an awareness of diversity and be respectful of individual differences.
- Provide an opportunity to establish and develop a professional relationship with a client(s); perform and evaluate dietary and physical fitness assessments; and develop, implement, and oversee an appropriate exercise and eating program for that client.
- Gain experience using the stages of change model for physical activity- and diet-related behaviors and behavior change techniques.

- Create a case study of the client by compiling a record of client outcome measures, goals, and progress, and evaluate and reflect upon the experience.
- Become comfortable with the competencies for ACSM's Certified Personal Trainer certification.
- Become familiar with the diversity of individual needs and barriers (environmental, financial, sociocultural, physical) to physical activity and how to respond appropriately to people seeking help from health promotion professionals.

D. <u>Competencies</u>

- On Thursday, Feb 14, you will take a written exam on basic nutrition and physical assessment knowledge. You will be expected to draw on knowledge and understanding gained in FN151 and 253, HPW 312, HPW 304; information from the text rental books, information reviewed in class, government documents, and material posted in D2L. In order to continue in this practicum, you must get ≥ 80% of the answers correct on the exam. If you fail the first time, you will have the opportunity to retake the exam the following Monday. A passing grade on the retake is ≥ 90% of the answers correct. Failure to pass the exam the 2nd time will result in the student being dropped from the course.
- By Friday Feb 21 you must complete and pass (≥ 80%) a practice physical assessment on another person. You will be required to perform a health and fitness assessment using the Microfit program in the lab which you will use for the testing of Healthy American students as well as manual assessments that will be identical to the ones you will perform on your client. You will be required to demonstrate proficiency of the assessment skills, calculations and interpretation of the data. For a list of skills see Appendix C. Those who do not pass will need to retake the practical and score ≥ 90% or will be dropped from the practicum.

E. Evaluation

Scale for grading is ≥93%=A, 90%=A-, 87%=B+, 83%=B, 80%=B-, 77%=C+, 73%=C, 70%=C-, 60%=D, <60%=F

1. Written test on fitness assessment and nutrition will be graded as above; <80% with passing retake=C (10% of final grade)

2. Practical test graded as above; <80% with passing retake=C (10%)

3. Students must attend scheduled classes and assigned shifts in the lab. \leq 1 absence=A, 2=B, 3=C, 4=D, \geq 5=F. (20%)

4. Students will submit copies of the initial physical assessment (including bike test graph and all calculations), clearly indicating results and risks and a 1 paragraph discussion of the findings and how they relate to the program you designed with your client. Students will submit the Goals (SMART) they and the client have decided upon and the rationale for why those were selected. (10%)

5. Students will deliver a presentation according to instructions provided. (15%)

- 6. Students will prepare a diet analysis for their client. (10%)
- 7. Students will prepare a typed case study regarding their client (15%)
- 8. Reflection of practicum experience (10%).

F. About this practicum

- Client testing will begin the week of Feb 25 and Healthy American testing the week of Mar 4 (see schedule). Therefore, you do not have much time to be prepared, be ready to be checked out and therefore ready to work with your clients. It is your responsibility to get prepared. Keep in mind that you are not expected to be perfect; however, you should be competent with your assessment and behavior change skills.
- Quality practice makes you a <u>better</u> professional, therefore the <u>more practice you have the better</u> <u>you will be</u>. Class meetings are mandatory (after one absence your grade will be affected). In addition, the lab will be open at other times during the first 4 weeks for more time to practice; arrange this with the instructor.
- After the testing period, you will be working with your client(s) every week for 7 weeks. In addition, you will be assigned ~25 hours of Healthy American health/fitness testing (this will be 1 or 2 shifts per week of 2-4 hours). Because Healthy American students sign up for a time slot ahead of time it is critical that someone is there to test them. Therefore, it is critical that you are able to be at your assigned shift (we will talk about procedures in case of emergency events that are beyond your control).
- We will meet <u>every Thursday</u> to discuss various topics, brainstorm issues that have arisen with clients or HA students and provide updates on client progress. There are no excused absences; to determine if any accommodations might be possible discuss this with us *in advance*.
- I expect this class to be an interesting and rewarding class for everyone involved and expect you
 to conduct yourself in a professional and competent manner. If you need help, ask. You may
 check out equipment overnight, provided you return it promptly.
- Please maintain client confidentiality and follow the professional code of conduct.

G. Code of Conduct

- 1. Adhere to code of conduct in whatever location you are at (i.e. Cardio Center, Pacelli High School, Sentry Insurance).
- 2. Adhere to this course's code of conduct, especially as it pertains to client confidentiality.
- 3. Regardless of the location/environment, remember that you are an agent of UWSP and this course, so please act in a respectful and professional manner.

H. <u>Attire</u> It is expected that during any contact with your client that you are dressed in a professional manner.

- 1. Jeans, cut offs, bike pants, t-shirts, baseball caps, etc. are <u>not</u> acceptable professional dress.
- 2. During testing, you should be dressed with clean and neat slacks, shirt, socks and a presentable appearance.
- 3. When training your client, attire that allows you to be active with your client is expected.

I. <u>Suggestion for keeping records</u>

It will be helpful to create a THREE RING BINDER or some other organizational system for this class, bring it each day to class and put every handout in it. You should also keep all your client related materials in it including your clients medical history forms, informed consent, goals, stages of change, all testing data, dietary intake or assessment sheets, logs of your client's workouts, information that you created or gave to your client and any other interactions with your client. In the past, students have used these as samples when interviewing for jobs and internships.

J. Case Study

- The <u>CASE STUDY</u> is a narrative of your experience with your client. The case study gives me an idea of what you accomplished and a picture of what happened with your client. Ideas of what to include:
 - 1) A general description of your client and the interaction at your first meeting; include medical or physical concerns, client goals, where they were along the stages of change continuum
 - 2) The pre and post test results (tables or graphs are strongly suggested) and a discussion of whether the changes were significant or measurement error; including what happened with stages of change; client adherence to the program, etc.
 - 3) A summary of the training program you designed for your client and how this was intended to meet their goals. Actual program details and training logs should be included in this section. You can comment on how the client responded to the program (physically, motivationally). Include any changes you made along the way and why
 - 4) What goals were met or not met by your client and a discussion of this
 - 5) What you did for an exit strategy (what you did to ensure client will sustain behaviors)
 - 6) Any final thoughts about your experience with your client, changes you would have made if given the chance to repeat the experience.

This case study is for my eyes only. You may or may not choose to share it with your client or future employers. Therefore, please **remove all personal identifiers**. Please take some time with it, as it is an excellent reflection tool. This is due May 9th.

Rubric for evaluation:

Using proper grammar, sentence clarity, free of typos 10% Content (how well did you address the above 6 items) 70% Does the case study look professional? (how well organized, appearance) 20%

K. Final Reflection

1) A one-page (minimum) reflection on your overall experience in the practicum. Please include a section about your experience of testing Healthy American students. You can include discussion of what you learned, what was most difficult, what was most rewarding, how it compared with the interactions you had with your client, etc. Also Include sections about your experience with your client(s) and the other components of the course. Please include suggestions for improving the experience for future practicum students and for your clients (e.g. what you wished you had known coming into the practicum, what would have been beneficial to learn about during the practicum, suggestions for improving the experience for the healthy American students). This is due at the time of the final exam

L. <u>Tentative class schedule</u>

Jan 24, 31, Feb 7, 14, 21	The first 4 weeks will be devoted to mastering basic nutrition knowledge and understanding and the competency skills for measuring heart rate, blood pressure, girth, skinfold body comp, flexibility, strength, aerobic capacity with a YMCA cycle ergometry test. In addition, we will discuss medical screening. During this time, you will contact your client for an initial meeting.
	Exercise and Nutrition content exam: Thursday Feb 14 Practical skills test: by Friday Feb 22 pass both with \ge 80%; retake test(s) pass with \ge 90%
Week of	
Feb 25	Pre-testing clients. Schedule clients for a fitness test in HEC 33.
Feb 28	Class: Make sure we are prepared to test Healthy American (HA) students
<u>Week of</u> Mar 4	Testing of Healthy American students begins (work your weekly shift or shifts) Client training Week 1
Mar 7 Mar 14 Mar 21	Class, (client assessment/goals due), client and HA testing updates Class; Client Week 2
Mar 21 Mar 28	No class (Spring Break); Client Week 3 Class, presentations; Client Week 4 (have mid-point client eval)
Apr 4	Class, presentations; Client Week 5
Apr 11	Class (initial diet analysis due), presentations; Client Week 6
Apr 18	Class, presentations; Client Week 7
Apr 25	Class, presentations; Client Week 8
May 2	Class, presentations; Post-testing of clients; meet with client for discussion/exit strategy; End of Healthy American testing
May 9	Class; Reflections on experience; class wrap-up: case study/diet analysis due
May 16	Final time (12:30-2:30) Final reflections due

Appendix A: Instructions for HPW 430 – Exercise/Nutrition Programming Projects

- 1. In-class presentation
- 2. Detailed food and nutrient analysis of client 2-3-day diet record

Presentation

Presentation should be ~ 20 minutes long

Students will make a **<u>presentation handout</u>** available to the rest of the students in the class. I will post this in public folders or copy it for the rest of the class if it is provided to me at least 1 day early. This handout should provide useful information for the audience

You may use your book for the material (if applicable) but you should also obtain <u>at least 2 other</u> <u>reliable resources</u> to draw material from (examples of what I mean by reliable resources will be posted in public folders and discussed in class). The sources that you use should be listed on your handout. Credit must be given to the sources from which you draw your information, do not plagiarize.

The information that you present should be directed to the level of your peers (fellow personal trainers and health promotion students). However, you should also <u>provide information that is relevant for use in their clients</u> (by this I mean you should provide at least one example of how the material can be used with a client). Incorporating physical demonstrations, role playing, or problem-solving using case studies would be especially useful.

Both peers and the instructors will critique your presentation.

Dietary recommendations: based on nutrient analysis of 2-3 day diet record

If your client desires to have a detailed nutrient analysis of their usual diet, you will offer this service. If they object to having this done **you will need to find another for whom you will provide this service** (parent, roommate, teammate, friend, etc.). The instructors may be able to recruit people if you let them know early.

You will provide your client with detailed instructions on how to write down everything they consume (eat and drink) for 2 or 3 days (documents posted in public folders). Since this process is tedious and cumbersome, clients may choose to do 2 days (1 weekday + 1 weekend day), although you must explain that the estimate of nutrient intake is more accurate when more days are analyzed.

You will use Nutritionist Pro software on the network to enter their food intake and obtain an estimate for the level of nutrients provided by the diet. You are welcome to use another diet analysis software, but <u>it is your responsibility to be assured that it will provide analyses of 3-day</u> <u>AVEARGE</u>. You are NOT allowed to have 3 separate nutrient analyses (one for each day).

Print out the following analyses of their usual diet:

- 1) Food guide pyramid analysis
- 2) Nutrition summary

You may also print out other documents, but the above 2 are required.

This initial analysis is Due April 11 in class

You will then assess their food choices according to FGP rec's and their nutrient intake according to the DRI's. Should the client need to make any changes to their diet, you will

choose up to 3 (no more) nutrients that need addressing. You will outline a small number of practical, actionable changes to their *FOOD* choices. These small changes should

1) bring greater balance to their FGP

2) begin to correct the nutrient issues you identified

3) take into account client food preferences and other lifestyle habits that impact eating patterns

You will then make those changes to their diet. So you go back to the saved dietary file on the network, save it as a new file, and make the changes you would advise them to make. Re-analyze the modified diet, print out the FGP and nutrient printouts, and present these documents to your client.

Your written report will consist of 6 sections:

1) Introduction – discuss client's thoughts on diet record, any concerns, interests, needs, etc.

2) Diet records – hand written sheets, note any problems interpreting their entries, etc

3) **Analysis** – 2 required printouts, your written comments regarding what you noticed most (good and bad), list 3 nutrients in need of correcting and justify why you feel they need changing (near the UL, below RDA/AI, etc)

4) Your food recommendations – why you chose those foods (nutrients, client preferences, etc)

5) **Analysis of modified diet** – how did your small handful of recommended changes impact their nutrient intake and FGP

6) **Reflections** on client response to your suggestions, etc.

You will **NOT** make recommendations on supplement use. The goal of this exercise is to strive to meet nutrient DRI's via balanced and varied food choices. Be prepared to discuss your client's case and the dietary changes you advised.

Due along with case study on May 9

APPENDIX B: Books in library for HPW 430 Exercise and Nutrition Practicum (* indicated on reserve at front desk)

Strength Training

Specialized Strength Training – Wayne Westcott

Strength Workouts for special populations (Normal, Weight loss, seniors, youth, golf, advanced, cardiac rehab, wheelchair; pictures and descriptions of Nautilus equipement)

* Building Strength and Stamina – Wayne Westcott

More pictures than the above book; includes circuit training, 2 and 6 month programs and some physiology

* Resistance Training Instruction – Everett Aaberg Principles and design and many pictures of specific exercises and muscles used.

Designing Resistance Training Programs – Steven J. Fleck

Comprehensive physiology of resistance training, designing programs, sections on women, children and seniors

Strength Training for Women – Lori Incledon

Programs specifically geared to women, models are all women, section on competitive lifting for women.

Women, Older Adults, Disease and Disability

Women's Fitness Program Development – Ann F. Cowlin

Comprehensive sections on women's adolescence, pregnancy (pre and post), and menopause.

* Exercise for Older Adults (ACE's guide for fitness professionals) – Richard Cotton editor Sections on physiology, motivation, common health challenges, screening and assessment, techniques, and programming for older adults.

Physical Activity Instruction of Older Adults – Jones and Rose editors More comprehensive text than the one listed above.

ACSM's exercise management for persons with chronic diseases and disabilities – ACSM (RM725 .A3 2003)

Books on Personal Training

* NSCA's Essentials of Personal Training – Earle and Baechle editors Textbook for NSCA Personal Trainer certification

The Complete Book of Personal Training – Douglas Brooks Text of personal training with more client focus and business sections

Exercise Prescription

Client Centered Exercise Prescription – John Griffin How to talk to your client about exercise, takes a much different approach than most texts.

Successful Fitness Motivation Strategies – Barbara Brehm How to motivate your client. Good question and answer examples

Exercise prescription: a case study approach to the ACSM guidelines - David Swain

(RM725.S92 2002)

Others

Applied Body Composition Assessment – Heyward and Wagner Standard reference text for body comp assessment.

Physiological Aspects of Sport Training and Performance – Jay Hoffman Exercise physiology text geared to athletes with an emphasis on training adaptations

Concepts in Fitness Programming – Robert McMurray

Science of flexibility - Michael J. Alter

Useful Journal (in current and bound periodical section 2nd floor)

ACSM's Health and Fitness Journal

Video (IMC)

American College of Sports Medicine certification [videorecording]: how to be better prepared – Walt Thompson (RC1210.A44 1999)

APPENDIX C: Physical Assessment Skill Competency Checklist

Before you perform assessments on your client, you will run through and be graded on a complete assessment done on one of your fellow classmates (or other person). You must perform the below skills accurately. Failure to complete 80% of them accurately results in a failing mark. You must then redo the assessment at a level of 90% accuracy.

Administer a Medical History Questionnaire ____ Administer and explain the importance of Informed Consent ____

Administer the following correctly (includes telling the client what you are going to do, asking about any safety issues, and explaining the significance of the measure).

Height Weight ____ Resting heart rate _ Resting blood pressure _____ Skinfold caliper body composition Girth Muscular strength tests handgrip dynamometer -isometric biceps curl _ 1 Rep Max Muscular endurance tests push-ups and curl-ups ____ YMCA bench press test ____ -Cardiorespiratory fitness tests - YMCA submaximal cycle ergometer test during test: measure HR, BP and RPE ____ explain termination criteria know about other CR fitness tests Flexibility test (sit and reach) ____ Calculations Max heart rate

85% of max heart rate ____ body density ____ percent body fat ____ BMI ____ Predicted max workrate ____ Predicted max VO2 ____

Interpretation, Explanation, and Prescription

- based on results be able to classify individuals using percentile scores or categories _____
- explain to client the importance of the fitness components _
- give advice/programming for improving the fitness components ____