

HP/W 430: Advanced Practicum in Health Promotion and Wellness (3 cr.)
Section 2 – Exercise & Nutrition Practicum
Fall 2018

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: ½ cost covered by HPHD dept., ½ 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 <https://www.choosemyplate.gov/> especially <https://www.choosemyplate.gov/health-professionals>
- <https://health.gov/>

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.
 - 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. Competencies

- On Thursday, **Sep 27**, 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 $\geq 80\%$ 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 $\geq 90\%$ of the answers correct. Failure to pass the exam the 2nd time will result in the student being dropped from the course.
- By Friday **Oct 5** you must complete and pass ($\geq 80\%$) 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 $\geq 90\%$ or will be dropped from the practicum.

E. Evaluation

Scale for grading is $\geq 93\%$ =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 (15% of final grade)
2. Practical test graded as above; $<80\%$ with passing retake=C (15%)
3. Students must attend scheduled classes and assigned shifts in the lab. ≤ 1 absence=A, 2=B, 3=C, 4=D, ≥ 5 =F. (10%)
4. Students will submit copies of the initial physical assessment, 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. (10%)
5. Students will deliver a presentation according to instructions provided (tbd). (15%)
6. Students will prepare a diet analysis for their client (potentially work with FN 454 students, tbd). (15%)
7. Students will prepare a typed case study regarding their client along with a reflection of their experience testing Healthy American students. (Due finals week). (20%)

F. About this practicum

- Client testing will begin the week of Oct 8 and Healthy American testing the week of Oct 15th (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 better professional, therefore the more practice you have the better you will be. 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 **every Thursday** 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. Attire 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 not 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. Suggestion for keeping records

- 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 **CASE STUDY** is a narrative of your experience with your client. It should be 3 - 4 pages (1 or 1 1/2 spaced). 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 and how the client responded to that program; what changes did you make along the way, etc.; (Save all of the daily training logs)
 - 4) What goals were met or not met by your client and a discussion of this
 - 5) What you did for an exit strategy
 - 6) Your overall reflection of your experience including specifics on what you learned, what you wish to further work on
 - 7) A one-page (minimum) reflection on the 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.
 - 8) A paragraph about your overall experience in the practicum. You should 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 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 in my office no later than **Wednesday Dec 19 by 12:15**. I will not return these to you so please make a copy for yourself.

K. Tentative class schedule

Sept 6, 13, 20 (visit to health services), 27
Oct 4

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 Sept 27
Practical skills test: by Friday Oct 5th
pass both with $\geq 80\%$; retake test(s) pass with $\geq 90\%$

Week of

Oct 8

Pre-testing clients. Schedule clients for a fitness test in HEC 33. The lab will be available during our class time on Thurs. Other times can also be set up.

Oct 11

Class (make sure we are prepared to test HA students)

Week of

Oct 15

Testing of Healthy American students begins (work your weekly shift or shifts)
Client training Week 1

Oct 18

Class, (client assessment/goals due), client and HA testing updates

Oct 25

Class; Client Week 2

Nov 1

Class, presentations; Client Week 3

Nov 8

Class, presentations; Client Week 4

Nov 15

Class (initial diet analysis due), presentations; Client Week 5

Nov 22

No class (Thanksgiving); Client Week 6

Nov 29

Class, presentations; Client Week 7

Dec 6

Class, presentations; Post-testing of clients; meet with client for discussion/exit strategy; End of Healthy American testing

Dec 13

Class; Reflections on experience; class wrap-up

- I am working on a visit to the Sports Performance Center (UW Health at the American Center, Madison)

This is Draft and Will change

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 presentation handout 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.

You may use your book for the material (if applicable) but you should also obtain **at least 1 other reliable resource** 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 provide information that is relevant for use in their clients (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 it is your responsibility to be assured that it will provide analyses of 3-day AVERAGE. 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 3 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 Dec 19

**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 equipment)

* 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 Incedon

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 ____