



College of Health and Human Performance

Department of Exercise Sciences



BRIGHAM YOUNG UNIVERSITY
Department of Exercise Sciences

ExSc 673: Advanced Obesity and Weight Management
Credit: Three (3) hours
Textbook: The literature
Instructor: Larry Tucker, Ph.D.
Office: 237 SFH
Phone: 422-4927; **email:** tucker@byu.edu

Approximately 2 out of every 3 adults in the U.S. are overweight or obese. Most Americans are misinformed and confused about the weight loss and weight gain processes. The focus of this course will be on the scientific literature relevant to obesity and weight management, specifically the causes and consequences of this growing epidemic.

Course Objectives:

After completing this course, students should be able to:

1. Define and explain the terminology associated with obesity and weight management on a written essay exam
2. Describe the causes and consequences of obesity on a written essay exam
3. Discuss on a written essay exam appropriate behaviors and interventions for treating obesity
4. Thoroughly review and report the literature regarding the causes and consequences of obesity and factors associated with management of body weight and body fat using Article Reviews and a binder of Abstracts, which will be graded by Dr. Tucker
5. Write a report, and give a related presentation, using PowerPoint about a specific topic associated with weight management and the causes and consequences of obesity that will be evaluated by Dr. Tucker
6. Write a newsletter article that will be evaluated by Dr. Tucker that would increase the understanding of the general public regarding weight loss or obesity
7. Practice sound principles of weight loss or teach someone else to practice sound principles of weight loss, and submit a written report about your experience that will be evaluated by Dr. Tucker
8. Read a popular weight loss book and write an evaluation of the book that will be graded by Dr. Tucker

Exams

Two short-answer, essay exams will be given during the semester, one approximately midway through the semester and one during Finals week.

Attendance

Regular attendance, punctuality, and active participation are expected of everyone. More than three absences or three tardies may result in a grade penalty. In short, for this course to be successful, you are needed in class.

Assignments

A. Obesity/Weight Management Paper and Presentation (65 + 25 points)

There are many interesting topics within the area of obesity and weight management. You should select a narrow topic that you would like to research in-depth. Write the title of the paper/presentation you would like to work on, along with a paragraph summary, and have your topic approved by Dr. Tucker in advance. Your topic should not overlap any other assignment or paper, except your presentation discussed below.

Your paper should be typed, single-spaced using a 12-point "Times" or "Times New Roman" font and one-inch margins. Double-space between paragraphs. Your paper should be at least 2500 words and fewer than 3500 words in length, not counting your title page or reference list. Indicate the number of words on your title page. Thoroughly review the literature. Discuss appropriate associations and models. Include a minimum of 12 references. Use web-based citations sparingly, if at all. Use bolded headings liberally to separate the sections of your paper. All statements of fact that are not widely known should be referenced. When in doubt, reference the statement (sentence).

Do not reference paragraphs! Use the referencing strategy of your choice, but be consistent.

DUE: _____

In addition to the paper, you should prepare a PowerPoint presentation based on your Obesity/Weight Management paper (above) to share with and educate the class. You will be given _____ minutes near the end of the semester to give your presentation. An electronic copy of your presentation should be emailed to Dr. Tucker (tucker@byu.edu) on the morning of the presentation (as an attachment).

DUE: _____

B. Article Reviews (variable points, depending on the assignment)

Students will be assigned to review specific obesity and weight management articles and chapters. Some times, students will be required to present/share information about their articles/chapters in class and include a type-written review. Other times, students will not present their articles, but will only give copies of their written reviews with the other students in class. Each article/chapter review should be about 2 pages in length (printed on one page, front and back), using a 12 point font and one inch margins. No review should be more than one page, front and back. All reviews should summarize the article/ chapter in detail. Complete citation information should be included at the top and front of each review, along with your name in the upper right corner. One copy of the review (printed front and back) should be brought to class for each person in class, plus two copies for your instructor, on the day it is due. One of the copies given to your instructor will be returned with comments.

Each review should include HEADINGS and SUBHEADINGS that correspond to each and every heading and subheading of the article/chapter reviewed. Under key headings, you may write several paragraphs of review, whereas under secondary headings, you may write only a sentence or two. Critical phrases, quotes, important concepts and other vital information should be included under each heading and/or subheading. Include the meat—the information that will be of the greatest value to the other students. Information about Subjects, Methods, Results, and Conclusions should receive greatest emphasis. Inclusion of tables, charts, and graphs as part of the results is encouraged, but they will likely have to be reduced in size because of space limitations. The "cut-and-paste" method is probably the best to use for tables, charts, etc. Do not take the time to recreate the tables, charts, etc.

Failure to have your review ready on the due-date will result in a significant point deduction for that review. When asked to discuss your article(s) with the rest of the class, you must be prepared to answer questions and display a good understanding of your article. Points will be deducted if you are not well-prepared or you do not present the material in an organized and helpful manner. In other

words, students are expected to understand their articles and be prepared to help the rest of the class learn about their material.

If you have an excused absence from class and therefore cannot present your review, you are expected to have copies of the typed review to your instructor before class.

DUE: as assigned in class

C. Obesity Newsletter Article (15 points)

Each student will write (type) a professional newsletter article. The newsletter article should be about a specific obesity or weight management topic that most adults would find interesting, educational, and helpful. The newsletter article should be based on research findings published in professional research journals. For this assignment, the journal article(s) used as a foundation for the newsletter article must be recent (2005-2007). If you base your article on a particular research article or two, turn in a photocopy of the article(s) your newsletter piece is based on. Article length is crucial relative to newsletter publications. Space is limited and pre-established; hence, your newsletter article should be 600 ± 10 words in length, not counting the title, which should be relatively short, and "catchy" if possible. The exact number of words in the typed article should be identified on your paper cover. Remember, newsletter articles are not as formal as research papers. Writing in "second person" is OK (i.e., students can use "you" and "your" to personalize the message). Try to make the article fun to read, motivating, and geared toward high school reading ability.

DUE: _____

D. Binder of 50 Abstracts and Reviews (50 points ???)

Each student should read 50 research abstracts that summarize high quality studies conducted to improve our understanding of weight gain, obesity, and/or weight loss. Each abstract should be printed on 1 single page. If the abstract covers more than 1 page, then the back of the 1 page should be used (double-sided). Under no condition should two pages be used for the printed abstract.

Each abstract should be read thoroughly by the student. On the BACK of the abstract page, the student should type answers to the following questions. If the backside of the page was used to print part of the abstract, then use the lower-half of the back page to answer these questions. Use the bolded headings below to begin each of your specific responses. Keep your responses to about 2-3 sentences for each heading.

- 1) Purpose:** (What was the purpose of the study?)
- 2) Weaknesses:** (What were the weaknesses of the study?)
- 3) Key Finding:** (What was the single, key finding of the study?)
- 4) Application:** (How can we use the results of the study to reduce obesity, promote weight loss, etc?)

The 50 abstracts should be organized according to the purposes of the studies reviewed. Your abstracts should focus on no more than 5 topic areas within the discipline of obesity and weight management. Fewer topic areas are acceptable. You must have at least 10 abstracts within a topic area.

Each abstract page should be drilled/punched so that it fits into a 3-ring binder. The binder should contain a title page showing your name and a listing of the five (or fewer) topic areas covered by your abstracts and the number of abstracts covered in each area. Each topic area in your binder should be separated clearly by a labeled page and an index tab or a cardstock separator marked with the topic area.

Again, your abstract binder should not include 50 abstracts covering a multitude of weight loss or obesity topics. Instead, you should select abstracts that fit within a maximum of 5 topic areas. Abstracts of studies with similar focuses should be grouped together in sections/areas. Abstracts in the same section should be ordered according to the date of publication, with the most recent abstracts listed first. None of the topic sections should be labeled "Miscellaneous."

This is not a group assignment. You should not work with another person on this project. Abstracts should not be shared with classmates. None of the articles used in other assignments, such as your obesity paper, review articles, newsletter article, etc., or your thesis, may be included in your binder as an abstract. Abstracts that are missing or are graded as poor will result in the loss of 1 point.

A type-written list of the five or fewer areas you want to cover in your binder of abstracts, along with your name, must be submitted for approval by Dr Tucker by Sept 27, 2007

DUE: _____

E. Weight Loss Project (40 points)

It is much easier to read and write about weight management than it is to actually "practice what you preach." To help each student better appreciate the challenges and rewards associated with intentionally losing weight, you will have the opportunity to experience weight management personally, or by helping someone else lose weight.

The choice is yours—lose 6 pounds or more yourself during the semester, or help someone else lose 6 or more pounds. If you have a BMI of 25 or greater, you should lose the weight. The weight loss should occur at the rate of about 1 lb per week for six weeks. Once you or your assistant has lost the six pounds, you (s/he) should maintain the new weight for an additional two weeks. If you (s/he) lose weight at a rate faster than 1 lb per week, and achieve the 6 lb goal "early," then you (s/he) should maintain the weight loss for a longer time—until the entire eight weeks is over. In short, the total weight loss experience should take eight weeks (6 weeks of losing, followed by 2 weeks of maintenance).

The weight loss project should be summarized in a paper. You should use a 12-point font, "Times" or "Times New Roman" and your paper should be single spaced, with one inch margins. Double-space between paragraphs. The following headings and sections should be included:

- **Title**

The title of your paper should reflect the weight loss goal. Indicate if you or your friend served as the guinea pig to lose the weight.

- **Plan of Action (2-3 pages)**

Describe the methods that will be employed to lose the 6 lbs over the 6 week period and then maintain the loss for two additional weeks. Include detailed discussion of your plans covering both ends of the energy balance model (intake and expenditure). If you are the one trying to lose weight, describe how you should go about accomplishing this goal. If you are working with someone else and trying to help them lose weight, explain in detail how and what you will teach them, coach them, motivate them, and help them lose the weight. If you are trying to help someone else lose weight, you must meet with the person face-to-face at least once each week to coach the person in the weight loss process. You must coach the person at least one other time each week (a second time) by telephone or in person. The weight loss plan should be scientifically sound. Use references to support your plan. Remember, this is a PLAN. Plans are developed before the process of behavior change begins. Write your "Plan of Action" as a plan, not as a summary of what happened.

- **Results (½ page)**

Briefly explain how much weight you (your guinea pig) lost each week and in total, and discuss any deviations from a linear trend. Did you (s/he) lose more weight during the first two weeks, then plateau? In addition to your narrative discussion, include a **Body Weight Chart/Graph** showing clearly body weight changes across time. You (s/he) must weigh (on the same scale and in the same clothes) and record the results at least three times per week over the eight weeks of the project. Show the results of each weighing on the chart/graph.

· **Insights** (1 page)

Explain what you learned from this project. What experiences did you have that influenced the way you now think about weight loss? What new insights did you gain from this experience? Discuss.

· **Conclusion** (½ page)

End your paper with a formal conclusion.

· **Reference List**

Cite each and every resource you use in numerical order. Include all information so that anyone could easily find the resource given the information you provided in the reference. Use Web-based material minimally. Use primarily professional journals and high-quality books.

· **Weight Loss Log** (hand written and attached to the back of your paper)

During the eight weeks of the project (six weeks of weight loss and during the two weeks of weight maintenance), keep a hand written log detailing your experience. Each log entry should be dated. Write in your log at least three times per week. Log entries should include remarks about your feelings, difficulties and successes, insights, problems, ideas, etc.

Your grade for the 40 point weight loss paper will be based on the following:

Content (15 points)

- accuracy of information
- depth of information
- support and use of references
- logic and reasoning

Grammar (13 points)

- vocabulary and spelling
- punctuation
- headings
- grammar
- flow/transition

Actual Weight Lost + Log (12 points)

- quality of log
- did you or your guinea pig lose the six pounds and then maintain it for two additional weeks?

DUE: _____

F. Evaluation of a Popular Weight Loss Book (45 points)

Many adults turn to weight loss books to help them with the weight loss process. Some weight loss books are written by individuals with impressive degrees, yet their book is filled with misinformation or is misleading. Other books contain a wealth of valuable weight loss information.

Your assignment is to carefully read a popular weight loss book that you have not yet read. Evaluate each chapter and present your findings in a typed report. Your report should contain written evaluation of each chapter separately, as well as a final summary evaluation of the book as a whole. There is no need to start each chapter evaluation on a new page. Label each chapter with a bolded side heading in your paper. Each of your chapter evaluations should include between 200 and 400 words, and the word count for each chapter evaluation you write should be shown in your paper on the line with the heading. Your final summary evaluation of the entire book should be between 400 and 800 words, which should be shown on the line of the heading.

Single space your paper with double spacing between paragraphs. Use Times Roman or Times New Roman font. If a book chapter is mostly recipes, then evaluate the recipes collectively. Do they look good? Would you use them? Why or why not? In general, your evaluation of each chapter and the final summary evaluation should focus on the strengths and weaknesses of the chapter or total book. In your final summary evaluation, be sure to discuss your recommendation (i.e., would you encourage an overweight person to use the book?). Base your evaluation comments more on fact than opinion, although your feelings about the book are also important.

DUE: _____

FINAL GRADES

The final grade for this course will be based on the total number of points earned from all graded material. Following is a close but not exact guide regarding how grades will be assigned at the conclusion of the semester: 90% + (A), 80-89% (B), 70-79% (C), 60-69% (D), < 60% (E) Minuses and pluses will be used to differentiate among students within whole-grade categories.

Preventing Sexual Harassment

Title IX of the education amendments of 1972 prohibits sex discrimination against any participant in an educational program or activity that receives federal funds. The act is intended to eliminate sex discrimination in education. Title IX covers discrimination in programs, admissions, activities, and student-to-student sexual harassment. BYU's policy against sexual harassment extends not only to employees of the university but to students. If you encounter unlawful sexual harassment or gender-based discrimination, please talk to your professor; contact the campus EEO office (422-5895); or contact the honor code office (422-2847).

Students with Disabilities

Brigham Young University is committed to providing a working and learning atmosphere which reasonably accommodates qualified persons with disabilities. If you have any disability which may impair your ability to complete this course successfully, please contact the services for students with disabilities office (422-2767). Reasonable academic accommodations are reviewed for all students who have qualified documented disabilities. Services are coordinated with the student and instructor by the SSD office. If you need assistance or if you feel you have been unlawfully discriminated against on the basis of disability, you may seek resolution through established grievance policy and procedures. You should contact the equal employment office at 422-5895, D-282 ASB.