**Department of Health & Exercise Science**  
**Fall Quarter 2015**

**HLSC 225 - (4 units) Nutrition Theory & Practice**  
**COURSE SYLLABUS – Evening Session** CRN - 5206

**Date & Time:** M – W – 18:00 -19:50 pm  
**Location:** Zapara School of Business Room 236  
**Instructor:** William C. Andress, DrPH, MPH, MCHES  
**Phone:** 951-785-2174  
**Dept. #:** 951-785-2084

Health & Exercise Science Dept. Trailer, Room C  
**Office Hours:** T: 9:00 – 11:00 am; W: 10:00 – noon R: 3:00 – 5:00 pm  
Other hours available by appointment  
**E-Mail:** wandress@lasierra.edu

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**COURSE DESCRIPTION:**  
Focusing on the scientific study of basic nutrition, this course provides the essential foundation for personal dietary choices, for nutritional planning, and for further professional studies in this field. The course explores the nature and functions of six classes of nutrients, the principal food sources from which they may be obtained, the methods of nutritional assessment, the basic tools for diet design, and nutritional needs for special situations. Students are also introduced to crucial dietary factors in the pathogenesis and the prevention of major diseases in the USA.

**TEXTBOOK:**  

**COURSE OBJECTIVES:**  
By the end of this course, the student who invests quality time and thought in fulfilling the requirements will be able to do the following:

1. Intelligently discuss the specific roles and functions of the six recognized classes of nutrients.

2. Have a broad concept of the type of foods that comprise a healthy diet.

3. Explain the scientific logic for food classification and groupings currently recommended. (HES SLO #3 which states Apply standards, ethics, and expectations of professional communities related to health and exercise science.)

4. Have a clear understanding of the Food Pyramid and MyFoodPlate concepts and be able to utilize them as a planning tool in implementing optimal nutrition. (HES SLO #3 which states Apply standards, ethics, and expectations of professional communities related to health and exercise science.)
5. Be able to make more intelligent food choices through understanding how to read food labels.

6. Trace the processes by which carbohydrates, fats, and proteins are digested and metabolized.

7. Describe the roles of vitamins, minerals, and phytochemicals in disease prevention and health promotion, identifying important food sources of each. (HES SLO #1 which states Demonstrate critical thinking skills in addressing discipline-based questions.)

8. Identify crucial nutritional factors which contribute to the development and prevention of major diseases, such as cardiovascular diseases, obesity, cancer, diabetes, and metabolic syndrome X. (HES SLO #7 which states Understand how the social, cultural, spiritual, economic, political, and biological environments affect both personal and community health.)

9. Compare and contrast vegan, lacto-ova vegetarian and non-vegetarian diets, providing a scientific critique of their relative value in influencing health and disease. (HES SLO #1 which states Demonstrate critical thinking skills in addressing discipline-based questions.)

10. Differentiate between nutrition as science and nutritional fallacies, fads, and quackery. (HES SLO #3 which states Familiarity with standards, ethics, and expectations of professional communities related to human movement and health.)

11. Design a dietary plan that is sufficient in nutrients while minimizing the intake of unhealthy food choices. (SLO 1, 2 which state Familiarity with standards, ethics, and expectations of professional communities related to human movement and health, and Demonstrate knowledge and skills of research principles and methodologies relevant to the discipline).

GRADING and EVALUATION:
A maximum of 440 points toward the final grade can be earned by fulfilling the following requirements.

1. **Attendance and Involvement Expected.** La Sierra University makes provision for limited absences. However such absences are excusable only when they result from critical crises, such as personal illness or death in the family, and when timely information is provided to the teacher. Preferably this should be done in advance. Immediately upon returning to class, the student is to initiate negotiations with the teacher regarding assignments not fulfilled due to absences. Excessive absences (more than eight classroom hours), whether excused or unexcused, may result in a failing grade for the course. Students arriving more than 15 minutes late to class will be marked absent.

2. **Section Exams** (50 points each). There will be three sectional exams (one approximately every three chapters). Questions will be mostly multiple choice with additional true/false and possibly short answer responses.

3. **Final Exam** (100 points). The final is comprehensive and will test whether you have developed a satisfactory level of proficiency in the subject. Any student who has achieved an average of a B+ grade (88%) or higher on all three sectional exams may opt out of taking the final. The 88% will be strictly adhered to so don’t try to negotiate opting out if you have averaged 86 or 87%.

4. **Nutrient Calculation and Conversion Exercise** (20 points) – Instructions to be given in class.
5. **Personal Diet Recall -- Baseline Project** – (40 points)
   1. Three-Day Personal Diet Recall Using Vitabot program (*Objective 11*)
   2. Analysis of Recall with Recommendations (*Objective 11*)

6. **Special Dietary Change Project** (40 points)
   Each student will engage in his/her choice of one of the following dietary change projects for a period of three weeks. Further guidelines are given at the end of the syllabus.
   - Adopt a lacto-ova vegetarian diet
   - Adopt a vegan diet
   - Adopt a gluten-free diet
   - Eliminate junk foods from your diet
   - Eliminate unhealthy beverages from your diet

7. **Final Diet Recall Project** – (60 points)

   The components of this project are designed to meet HES departmental learning outcomes.
   - #1 -- Demonstrate critical thinking skills in addressing discipline-based questions through the application of knowledge and skills in experiential learning opportunities.
   - #2 -- Demonstrate knowledge and skills of research principles and methodologies relevant to the discipline while using valid sampling techniques with appropriate data collection and analysis.
   - #4 -- Demonstrate learned competencies and skills as part of learning activities and experiences.

8. **Chapter Summary Report** – (30 points) Due to the quarter system it is unrealistic to try to cover everything in the text. The first nine chapters cover basic nutritional principles. The latter half of the text builds on those principles and addresses special nutritional situations. For this assignment you will complete a study guide on one of the following chapters of your choice.
   - a) Chapter 10 – Nutrition: Fitness and Sports
   - b) Chapter 11 – Eating Disorders
   - c) Chapter 13 – Safety of Our Food Supply

9. **Pre-lecture Assignments** – In order to assist your class preparation, I will provide chapter summary questionnaires on Blackboard. You will not turn these in, nor will you be graded on them but they should be useful in preparing for classes.

**EVALUATION AND GRADING**
Student performance will be measured and graded according to the following standards and criteria:

1. Sectional Examinations (50 points each) 150 points
2. Calculations exercise 20 points
3. 3-Day Baseline Dietary Recall 40 points
4. Special Project 40 points
5. Final Dietary Recall with analysis 60 points
6. Chapter summary report 30 points
7. Final Examination (final week) 100 points

**TOTAL POINTS** 440 points
Assignments are due at the beginning of class on the designated date. Assignments after that, up to a week late, will be penalized 50%. No assignment will be accepted later than one week past the due date.

INSTRUCTIONAL METHODS AND ACADEMIC INTEGRITY

Methods of Instruction. The basic method of instruction will be lecture-discussion. There will also be take-home learning experiences, group discussion topics, a self-evaluation instrument, critical analysis, and careful writing. Stories, guest speakers, and documentary videos may also be used to enhance motivation and learning.

Professionalism

To prepare students for the professional world, certain behaviors/activities are not allowed in the classroom/lab:

- Cell phones should be turned off before entering the classroom. Texting, messaging, talking on phone, etc. are not permitted.
- Picture-taking and recording during class is not allowed.
- Laptops/iPads should not be used for surfing the web or watching movies during class. It is disrespectful and unprofessional to use these devices inappropriately during class.
- Late assignments are unacceptable and will be penalized accordingly.
- Tardiness is unprofessional behavior.
- Do not be disruptive or disrespectful to your colleagues and instructors. You may be asked to leave.
- When communicating via email with instructor, always use proper language and respectful address.

Active participation in class discussions and critiques is an essential part of learning. By participating and expressing opinions and thoughts, you can clarify your goals and develop a personal style. Thus you should:

a. Come to class prepared having read ahead of time text material and other pertinent handouts.

b. Engage in Active listening and thoughtful responses and inquiry during lecture/discussion exercises.

c. Be Actively involved in group discussions.

d. Submit written assignments on time. Assignments are due on the designated dates at the beginning of class. Papers that are up to one week late will receive a 50% reduction in grade. Assignments turned in more than one week after the due date will not be accepted except under emergency conditions where prior written approval has been granted.

Academic Integrity Statement

The student is expected to practice honesty in all activities related to this course. Original work is expected from the student, unless appropriate credit is given to specific work cited. Plagiarism is unacceptable, as are other types of cheating. This policy equally applied to exercise sessions; what you record on your exercise log must reflect exercise you actually performed. For details please see: http://lasierra.edu/academic-integrity/

Appropriate penalties will be enforced. All instances of academic misconduct will be reported to the Academic Integrity Committee. To be sure that you have no misunderstandings about definitions of academic honesty or academic dishonesty, refer to your LSU Student Handbook. The University has significant penalties for academic dishonesty, so please take this suggestion seriously. La Sierra University’s policy and other important information
regarding academic honesty can be found at: [http://lasierra.edu/academic-integrity/](http://lasierra.edu/academic-integrity/) For your convenience a portion of this policy is posted on Blackboard.

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All members of the community of scholars (students and faculty) at the university must agree to the following Academic Integrity Statement.

Understand that enrolling in this course constitutes your agreement with the following statements:

- ✓ I will act with integrity and responsibility in my activities as a La Sierra University student or faculty member.
- ✓ I will not participate in violations of academic integrity, including plagiarism, cheating, or fabricating information.
- ✓ I will not stand by when others do these things.
- ✓ I will follow the academic integrity policy.

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**Special Assistance**

It is the policy of La Sierra University to accommodate students with disabilities. Any student with a documented disability who requires reasonable accommodations should contact the Office of Disability Services at (951) 785-2453 or ods@lasierra.edu. The office is located in La Sierra Hall, Suite 100. Students with documented disabilities who require reasonable accommodations in order to participate in course activities or meet course requirements should contact the instructor during the first two weeks of the quarter.

**Campus Email:** Students are expected to check their campus email regularly for information regarding this course and to stay abreast of news and events at the University. Important data such as PowerPoint slides and study review guides will be placed on Blackboard.
**SCHEDULE OF TOPICS**

*NOTE*: This syllabus serves as a similar purpose as a contract. By enrolling in this class, you are accepting the syllabus and thereby entering into an agreement. Periodically adjustments may be necessary, thus the instructor reserves the right to make modifications to the syllabus (contract) as he/she deems necessary and will provide students as much notice as possible.

**COURSE SCHEDULE**

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<th>ACTIVITY</th>
<th>Assignment Due</th>
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<td>Introduction of Course</td>
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<td>McDougall Coloring Book</td>
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<td>• Personal introductions</td>
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<td>09/23</td>
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<td>09/30</td>
<td>Chap 2 – Reading Food Labels</td>
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<td>Test 1 Study Guide</td>
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<td>Chapter 3 – Nutritional Diseases</td>
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<td>Chap 4 – Carbohydrates</td>
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<td>10/14</td>
<td>The Sugar Blues Metabolic Diseases</td>
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| 11/02 | **Exam #2** – Chapters 4-6  
Chap 7 – Weight Control  
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11/04 | Go over exam 2  
Chap 7 – Weight Control  
Chapter 8 – Vitamin Overview  
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Evaluating Weight Diets  
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| 11/09 | Chap 8 – Vitamins (Fat Soluble)  
Chap 8 – Vit (Water Soluble)  
288-308 | In class activity  
Vitabot follow-up assignment  
Vitabol follow-up assignment  
11/11 | Chap 9 – Water Requirements  
308-334 | Video – “Water, Cool Water”  
The Vitamin Game  
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| Week 9 |  |
| 11/16 | Chapter 9 – Major Minerals  
356-373  
Chapter 9 – Trace Minerals  
372-393 | “The Great Grain Robberies”  
“The Great Grain Robberies”  
11/18 | Osteoporosis  
394-399 | Video on Calcium  
Vitabol Assignment Due  
Vitabol Assignment Due  
11/18 |  |
| Week 10 | **THANKSGIVING BREAK**  
11/23-27 |  |
| Week 11 |  |
| 11/30 | **Video** – Why Christians Get Sick  
Chapter Study Guide Due  
12/02 | Exam 3 feedback  
Q and A period  
12/02 |  |

**FINAL EXAM** – Monday, December 7 – 6:00 – 8:00 pm  
Comprehensive
**Personal Diet Recall -- Baseline Project** (40 points)

- Keep a written record of all food and drink items consumed over three consecutive days.
- Enter the data using the **Vitabot** program.
- Follow computer instructions for inputting data.
- Print out reports for each day. There should be one page of computer output per day. See handout for examples.
- Fill out the data analysis sheet. If a value is less than the RDA be sure to indicate it as a negative value.
- Based on your results identify the area you would like to work on for your special project. Remember this needs to be a category that your 3-day dietary intake signifies a need for improvement. Options are:
  - Adopt a lacto-ova vegetarian diet
  - Adopt a vegan diet
  - Adopt a gluten-free diet
  - Eliminate junk foods from your diet
  - Eliminate unhealthy beverages from your diet

- Final assignment will include the following:
  - Three days of computerized data
  - Your Vitabot data sheet showing your 3-day average values vs. recommendations
  - A statement addressing what topic your special project will address and why.

**Final Diet Recall Project** (40 points)

**Three-Day Personal Diet Recall and Analysis**
- Keep a written record of all food and drink items consumed over three consecutive days.
- Enter the data using the **Vitabot** program.
- Follow computer instructions for inputting data.
- Print out reports for each day. There should be one page of computer output per day. See handout for examples.

**Analysis of Recall With Recommendations for Improvement**
- This will be a typed report analyzing the data from the **Vitabot** printouts
- Write a 2-3 page reflection paper which includes the following:
  - Whether diet is properly balanced between categories of energy foods. What improvements, if any, should be made and how?
  - Nutrients where intake is deficient (Less than 75% of RDA).
  - Specific foods to add to your diet to make up those deficiencies.
  - Three areas of greatest change as a result of this class.
  - Two areas in which improvement is still needed.
  - What you learned about your eating habits through these exercises.