NUTR 607-Child Nutrition  
Spring 2017

Instructor: Mee Young Hong, PhD  
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Email: mhong2@mail.sdsu.edu  
Office hours: T & TH 12:30-1:30 pm, or by appointment  
Class Time: Thursday 4:00-6:40 pm  
Class Room: ENS 106  
Prerequisite: NUTR 302 and NUTR 302L

Textbook  

Course Description  
This course will serve to broaden the student’s knowledge and experiences in pediatric nutritional needs and the identification of markers that determine normal childhood nutrition and growth. Current research in therapeutic pediatric nutrition will be examined. Identification and assessment of unique nutritional needs of pediatric age groups will be investigated.

Course Objectives  
Upon successful completion of the course the students will be able to
1. Identify markers that determine optimal nutrition and growth in infants and children.
2. Identify and assess nutritional problems of infants and children with various pediatric disorders and conditions.
3. Identify and assess nutritional needs of different pediatric age groups and various diseases and conditions.
4. Examine findings of current research for a selected pediatric condition.
5. Explain current recommendations related to appropriate sports nutrition practices for children adolescents.

Course Evaluation  
Mid-term examination 100 points  
Final examination 100 points  
Presentation 50 points  
Term paper 50 points  
Group project 100 points  
Participation 30 points  
Total possible points: 430 points

Grading scale  
A = 90-100%  
B = 80-89.9%  
C = 70-79.9%  
D = 60-69.9%  
F = below 59.9%
**Exams**
All examinations will be based on material covered in class by the instructor and all information presented by the students in presentations. Exams will be both objective and subjective in nature. Final exam will be comprehensive. Please bring a green scantron (Form No. 882-E) for midterm and final exams. There will be no make-up exam without prearranged permission from the instructor. If an exam is missed without prior notification of the instructor, a score of zero will be given for that exam.

**Presentation**
Student will present own research to the class on the date assigned (30 minutes). The presentation must be presented using Powerpoint and the presentation should be emailed to the instructor by 2 days prior to your presentation. Failure to do so will result in 5 points per day penalty. Delivery, organization, content, slide preparation and interaction with audience will be evaluated.

**Term paper**
Prepare a 8-10 page type-written (double spaced) paper on the topic you are assigned. The paper can be written broad or very specific manner on the topic. Make sure to include any potential mechanisms. A complete list of references must be provided on a separate page and written following the Journal of the American Dietetic Association style. A minimum of 10 references should be included and 8 of which must be peer-reviewed journal articles. You may use your textbook as a reference. The majority of the references must be current (5 years or less) and no reference may be older than 10 years. The paper is to be turned into the instructor on the due date. No late papers will be accepted. Please avoid plagiarism. Make your paper be original.

**Group project**
Group (3 students/group) will be formed on the first or second day of class. Each group needs to develop materials for nutrition education and practice the nutrition education within classes. Specific instructions will be given.

**Participation**
Students are expected to attend all classes and to be on time, to complete all assignments, to turn in presentation evaluation and to actively participate in class discussions. If you need to leave class early, please talk to me before class begins. Attendance can be waived by only extenuating circumstances or an emergency with formal documentation.

**Academic Integrity**
All work submitted in this course must be your own and produced exclusively for this course. The use of sources (ideas, quotations, and paraphrases) must be properly acknowledged and documented. If in doubt, you are encouraged to review guidelines for the proper use of sources (e.g., http://www.hamilton.edu/academics/resource/wc/usingsources.html), as well as the University guidelines (including definition and policy) regarding cheating and plagiarism http://its.sdsu.edu/resources/turnitin/pdf/Plagiarism_AcadSen.pdf

**Disability Accommodation**
If you have a documented disability and anticipate needing accommodations in this course, please make arrangements to meet with me soon. Please request that the Counselor for Students with Disabilities (619-594-6473) send a letter verifying your disability. You will receive the appropriate accommodations from the day that you provide me with the necessary documentation. Course accommodations will not be applied retroactively (e.g., after an examination).

**Syllabus change:** Information contained in the course syllabus may be subject to change with advance notice, as deemed appropriate.
# Tentative Class Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings</th>
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<tbody>
<tr>
<td>1/19</td>
<td>Course Introduction and Overview</td>
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<td></td>
<td>Group formation</td>
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<tr>
<td>1/26</td>
<td>Nutrition during infancy</td>
<td>Ch 5</td>
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<tr>
<td>2/02</td>
<td>Nutrition for premature infants</td>
<td>Ch 4, 9</td>
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<td>Nutrition support for inborn errors</td>
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<tr>
<td>2/09</td>
<td>Nutrition during childhood</td>
<td>Ch 6</td>
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<td></td>
<td>Nutrition for children with autism</td>
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<tr>
<td>2/16</td>
<td>Developmental disabilities</td>
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<td></td>
<td>Pulmonary diseases</td>
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<td></td>
<td>Gastrointestinal disorders</td>
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<td>2/23</td>
<td>Childhood obesity</td>
<td>Ch 15</td>
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<td></td>
<td>Childhood diabetes</td>
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<td></td>
<td><strong>Group project: reference and nutrition education plan due</strong></td>
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<tr>
<td>3/02</td>
<td>Nutrition during adolescence</td>
<td>Ch 6</td>
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<td>Added sugar and sugar tax</td>
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<td>Exam review</td>
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<td>3/09</td>
<td>Midterm EXAM</td>
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<td>3/16</td>
<td>Eating disorder</td>
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<td>Renal disease</td>
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<td>Burned pediatric patient</td>
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<td>3/23</td>
<td>Oncology</td>
<td>Ch 16, 17</td>
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<td>Pediatric HIV</td>
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<td>3/30</td>
<td>Spring Break</td>
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<td>4/06</td>
<td>Enteral nutrition/Parenteral nutrition</td>
<td>Ch 7, 19,</td>
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<td>Food allergy</td>
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<td>4/13</td>
<td>Sports nutrition for children and adolescents</td>
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<td>WIC program</td>
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<td>4/20</td>
<td>Group project presentation</td>
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<td>4/27</td>
<td>Group project presentation</td>
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<td>Conclusion of class</td>
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<td>*** Group project – Materials due</td>
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<td>*** Term paper due</td>
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<td>*** Exam review</td>
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<td>5/04</td>
<td>EXAM 4:00-6:00 pm</td>
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School of ENS learning goals and objectives

NUTR607 will provide multiple learning opportunities to support the following goals and objectives of the School of Exercise and Nutritional Sciences:

**Learning Goal 1. Demonstrate core critical thinking skills and dispositions to ask and answer questions relevant to exercise and nutritional science**
- **Objective 1.1:** Critically evaluate published research in the discipline
- **Objective 1.2:** Evaluate alternative solutions to a discipline-based problem.
- **Objective 1.4:** Critically evaluate current trends and practices using disciplinary knowledge.
- **Objective 1.5:** Actively seek out discipline-based questions as opportunities to apply core critical thinking skills.

**Learning Goal 2: Demonstrate effective oral, written, and other interpersonal skills to help communicate knowledge and promote health and wellbeing in diverse communities.**
- **Objective 2.1:** Use effective technical writing skills to communicate information about exercise and nutritional science.
- **Objective 2.2:** Use effective oral presentation skills to present information to peers and other professionals.

**Learning Goal 3. Demonstrate understanding of scientific concepts, principles, and methods used in the study of exercise and nutritional science**
- **Objective 3.1:** Identify and explain the underlying assumptions of different research paradigms used in exercise and nutritional science.
- **Objective 3.2:** Identify the steps in the scientific method of research.
- **Objective 3.3:** Select and apply appropriate methods to maximize internal and external validity and reduce the plausibility of alternative explanations.
- **Objective 3.4:** Articulate the strengths and limitations of various research designs.
- **Objective 3.5:** Design a research study and collect, analyze, and evaluate findings in relation to a proposed hypothesis.

**Learning Goal 4. Use an array of technologies to support inquiry and professional practice**
- **Objective 4.1:** Use the internet and e-mail to communicate with others and find valid information.
- **Objective 4.2:** Use various technology instrumentations to measure phenomena of interest.
- **Objective 4.3:** Use software programs appropriate to discipline to organize, analyze and interpret findings.
- **Objective 4.4:** Use presentation software to report project findings.

**Learning Goal 5. Demonstrate ethical decision making, cultural competency, and civic responsibility when applying knowledge of exercise and nutritional science.**
- **Objective 5.1:** Identify and explain components of ethical decision making, cultural competency and civic responsibility applied to exercise and nutritional science.
- **Objective 5.2:** Use non-discriminatory/inclusive language when working with peers and clients in on-campus and off-campus settings.
- **Objective 5.3:** Design an exercise/nutrition prescription or lesson plan that considers cultural differences that may influence implementation.

**Learning Goal 6. Use biological, behavioral, psychosocial, and ecological theory-based perspectives to design and evaluate behavior change interventions in exercise and nutritional science.**
- **Objective 6.1:** Differentiate between biomedical and biopsychosocial explanations of health and wellness.
- **Objective 6.2:** Describe the biological, psychological, social, and environmental correlates and determinants of behavior change relevant to physical activity and diet.
- **Objective 6.3:** Integrate multilevel determinants into behavior change interventions for individuals, communities, and populations.
- **Objective 6.4:** Evaluate the efficacy and effectiveness of behavior change interventions in exercise and nutritional science.

**Learning Goal 7. Use the principles of assessment to evaluate a variety of measurement tools in exercise and nutritional science.**
- **Objective 7.1:** Explain the various kinds of validity evidence necessary to determine the quality of objective and subjective measures used in exercise and nutritional science.
- **Objective 7.2:** Evaluate the validity and reliability coefficients for a variety of tools to determine their quality.
- **Objective 7.3:** Evaluate the responsiveness, sensitivity, and specificity of measurement devices used in exercise and nutritional science.
- **Objective 7.4:** Collect data to examine the reliability or objectivity of common measurement tools in exercise and nutritional science.
- **Objective 7.5:** Evaluate the feasibility of different measurement tools in various settings.
- **Objective 7.6:** Describe ways to implement a measure or test to increase its reliability.

**Learning Goal 8. Demonstrate the ability to integrate and apply knowledge and skills through experiential learning opportunities.**
- **Objective 8.1:** Implement a physical activity, rehabilitative, or nutritional plan in an applied setting and assess its effectiveness.
- **Objective 8.2:** Administer assessments in a variety of special populations, including children/adolescents, young adults, and older adults.
- **Objective 8.3:** Organize and structure learning and research environments to maximize their quality and safety.
Group project

Topic: Nutrition education

Many studies have shown that development of good dietary habits in childhood and adolescence is very critical for their current and future health and quality of life. Nutrition education in early stage of life cycle plays a significant role on establishment of healthy food choices and good dietary habits.

The purpose of this group project is to develop and practice an effective nutrition education for a target group.

• Subjects: Choose any age group of childhood (1-18 years old)
• Topic: Choose a nutrition topic to fit the target education group
• Total time: 30 minutes
• Education materials: Develop education materials to convey effective and proper nutrition education for the target group (PPT presentation, game, post board, hand-out, flyer, cooking class, workshop, etc.)

1. Literature search on the topic (10 pts). Please read research papers to learn about nutritional status of your target group, to figure out potential nutritional problems and issues, and to develop nutrition educations for the target group. Turn in >5 most relevant paper abstracts.


3. Education materials (30 pts). Bring your developed education materials. They can be powerpoint slides, game, post board, quiz, survey, etc. Preparation, use of materials and effectiveness will be evaluated

4. Presentation (40 pts): Each group will practice the developed nutrition education within the class (30 minutes). Proper topic, delivery, organization and interaction with audience will be evaluated

5. Peer evaluation (10 pts). Each student evaluates the contribution of group-mates for the group project.