Course Number and Title: PYPP 5800- Pharmacy Nutrition

Credit Hours: 2

Pre-requisites: Third-year PYDI standing

Course Description: Provides pharmacy students with a thorough understanding of clinical nutrition as related to pharmacy practice. Students will learn how to develop appropriate parenteral and enteral nutrition therapy for individual patients.

Date of Faculty Approval: August 22, 2008

Learning Objectives:
- Identify basic functions of carbohydrates, protein, and lipids and how these are digested and absorbed.
- Calculate nutritional requirements for healthy patients, including calories, protein, carbohydrate, and fat.
- Recognize disease states requiring adjusted nutritional needs and calculate appropriate adjustments.
- Identify medications that impact nutrition status and appropriate recommendations.
- Discuss nutrition support and when it is appropriate for use.
- Differentiate between tube feeding and total parenteral nutrition and appropriate situations when each is used.
- Calculate fluid, calories, and protein needs for enteral feeding and choose an appropriate formula.
- Calculate fluid, calories, protein, and lipid needs for TPN and be able to write a TPN order for micro and macronutrients.

Course Expectations:
- Attendance and participation in the class discussions
- Complete the assigned reading(s) and come prepared for discussions
- Class assignments and worksheets
- Class health education project

HSOP Curricular Outcomes:

- Evaluate pharmacotherapy of individual patients
  - Evaluate patient specific drug therapy and non-drug therapy
  - Gather compile and evaluate subjective and objective data
  - Determine pharmacotherapy goals (patient advocacy, collaboration with patient and other healthcare professionals)

- Provide Appropriate Pharmacotherapy Interventions to Individual Patients
  - Develop evidence-based pharmacotherapy recommendations and plans to prevent or resolve medication-related problems or to respond to information requests
  - Communicate evidence based recommendations and plans to patients and health care professionals
  - Advise patients about drug choices and other treatment options
  - Provide patient counseling relative to pharmacotherapy / health maintenance / wellness
  - Evaluate therapeutic plan (including monitoring)
  - Document pharmaceutical care activities for ongoing patient care, quality control, quality assurance, and accountability
• **Participate in Public Health and Professional Initiatives and Policies**
  
  o Identify potential opportunities to serve the public
  o Educate the public and other health professionals to improve health promotion and disease prevention

• **Advance the Profession**
  
  o Educate current and future health care professionals (mentoring, peer teaching) to influence their decisions, share responsibility, and maintain effective working relationships
  
  o Evaluate own and peer’s behavior against professional standards and take appropriate actions

**Resources/Textbook(s):**


• Articles provided by instructor and other postings on the Blackboard site

• Power Point presentations by coordinator/instructors

**Course Evaluation Method:**

<table>
<thead>
<tr>
<th>Course Requirements</th>
<th>Percent of Final Grade</th>
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</thead>
<tbody>
<tr>
<td>Individual assignments</td>
<td></td>
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<tr>
<td>• Worksheets</td>
<td>20%</td>
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<tr>
<td>• Midpoint Exam</td>
<td>30%</td>
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<tr>
<td>• Final Exam</td>
<td>30%</td>
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<tr>
<td></td>
<td><strong>80%</strong></td>
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<tr>
<td>Group assignments</td>
<td></td>
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<tr>
<td>• Patient education material</td>
<td>10%</td>
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<tr>
<td>• Group health education project</td>
<td>10%</td>
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<tr>
<td></td>
<td><strong>20%</strong></td>
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</tbody>
</table>

Final Grades will be determined using a scale of:

A= 89.5% or higher
B= 79.5 – 89.4%
C= 69.5 – 79.4%
D= 59.5 – 69.4%
F= below 59.4%

**Worksheets** – Students will be assigned worksheets by the instructor(s) most weeks that are to be completed prior to the next scheduled class. Students are expected to complete assignments prior to class and submit for individual grading. The worksheets are designed to help emphasize the material that was presented that day, preparation for the next lesson, and application of the material.

No late assignments will be accepted and a grade of 0% may be given for that assignment if not turned in at the beginning of class. See the attendance policy for assignments not turned in during an excused absence.

**Exams** – Two in-class scantron/paper examinations will be given during the semester (a midpoint and cumulative final). The exams may include essay, calculations, multiple choice, and short answer questions. Use of certain materials or references may be allowed by students during the exams. This will be left to the discretion of the participating instructors and will be announced prior to each exam. Grades will be posted on Blackboard.

**Patient Education** – Groups will be assigned a topic by instructor(s). Students should develop patient education materials for this topic in a format deemed appropriate by the students and approved by the instructor. Groups will then present the material to the class as if the class were the patients. See
Group Health Education Project – Designed for outreach into the community. At the beginning of the semester, the class as a whole will decide what type of project it would like to design and implement before the end of the semester. All students are expected to participate. The project will emphasize wellness education to the general public. The project must be approved by the course coordinator prior to initiation. Each student will honestly self-evaluate their level of participation and provide documentation of their activity with the project. The material will then be submitted to the instructor along with a request for a project grade. The instructor will then review the material and the grade request before assigning the participation grade. Grades will be assigned as follows:

- Extensive Participation (including leadership role) – 100%
- Active Participation (idea contribution/help with set-up) – 90%
- Passive Participation (showing up, minimal contribution) – 80%
- No Participation – 0%

Course Policies

Posting of Assignment Scores and Course Grade

All project scores and the final course grade will be posted on the Blackboard website. Since each student will have access ONLY to his/her own scores and grade, a student may NOT "opt out" of having his/her scores and grade posted.

Challenges to Examination Questions

Students may challenge any question on an exam for full or partial credit. The challenge MUST be submitted within 48 hours of the day the exam results are posted. A challenge will be considered by the person who wrote the question. His or her decision will be final.

Questions on Class Material

Questions are always welcome and may be posted at any time on the discussion forum located at the Blackboard website. Faculty will attempt to respond to questions posted on the discussion forum within 24-48 hours, UNLESS the question is posted on a Friday OR a student places numerous questions on the forum shortly before an examination is scheduled. In other words, questions should be posted as they arise during your (routine) reading and studying.

Attendance Policy

- Participation each week is mandatory. An unexcused absence may result in failure of the course. Students must request and obtain an excused absence prior to the class session they will miss. In the case of absences for medical reasons, students must notify the course coordinator of their illness at the earliest possible time. The instructor may require medical documentation of illness if he/she believes this to be necessary.
- The instructor is not responsible for temporary inability to access the internet.
- Students are expected to complete all assignments and evaluative assessments at the time and place designated by the instructor.
- A method and timetable for making up assignments missed during excused absences will be determined by the instructor within one week of the end of the excused absence.
- According to the Auburn University approved calendar, classes are scheduled on the last day before and the first day after holiday periods designated by the University.
- Unresolved problems regarding class attendance or procedures should be addressed according to the process outlined in the Student Academic Grievance Policy found in the Tiger Cub.
**Classroom Conduct and Academic Dishonesty**

Students are reminded that their actions are governed by the Harrison School of Pharmacy honor code. A professional demeanor is expected at all times. A student suspected of academic dishonesty will be referred to the Harrison School of Pharmacy Honor Board.

**Grievances**

Any problem concerning course policies, procedures, and grading should be addressed according to the process outlined in the Student Academic Grievance Policy found in the Tiger Cub.

**Special Needs:**

Students who need special accommodations in class, as provided for by the American Disabilities Act, should arrange a confidential meeting with the instructor during office hours the first week of classes - or as soon as possible if accommodations are needed immediately. You must bring a copy of your Accommodation Memo and an Instructor Verification Form to the meeting. If you do not have these forms but need accommodations, make an appointment with the Program for Students with Disabilities, 1244 Haley Center, 844-2096.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic/Activity</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Intro to course/ Nutrition Basics</td>
</tr>
<tr>
<td>Week 2</td>
<td>Macronutrients: Carbohydrates/Lipids/Protein</td>
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<td>Week 3</td>
<td>Micronutrients: Vitamins/Minerals Nutrition in the Life Cycle</td>
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<td>Week 4</td>
<td>Guidelines for Dietary Planning</td>
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<td>Week 5</td>
<td>Nutrition Care: Dietary and Lab Assessment</td>
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<td>Week 6</td>
<td>Food-Drug Interactions</td>
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<td>Week 7</td>
<td>Midpoint Exam</td>
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<td>Week 8</td>
<td>Nutrition Diagnosis and Intervention</td>
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<td>Week 9</td>
<td>Enteral and Parenteral Nutrition Support</td>
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<td>Week 10</td>
<td>Weight Management</td>
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<td>Week 11</td>
<td>Medical Nutrition Therapy for GI and Related Disorders</td>
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<td>Week 12</td>
<td>Medical Nutrition Therapy for Cardiovascular and Related Disorders</td>
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<tr>
<td>Week 13</td>
<td>Medical Nutrition Therapy for Renal Disorders, Cancer, and HIV</td>
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<tr>
<td>Week 14</td>
<td>Patient Education Presentations/Completion of Class Project</td>
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<tr>
<td>Week 15</td>
<td>Final Exam/Final Course Evals</td>
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</tbody>
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* Assignments may be moved around to accommodate pharmacy activities and instructor schedules.