NEW COURSE FORM

1. **General Information.**
   a. Submitted by the College of: Medicine
   b. Department/Division: Graduate Center for Nutritional Sciences
   c. Contact person name: Lisa Cassis, PhD
   d. Requested Effective Date: □ Semester following approval OR □ Specific Term/Year: Fall 2010

2. **Designation and Description of Proposed Course.**
   a. Prefix and Number: MD 825
   b. Full Title: Nutrition for Physicians II
   c. Transcript Title (if full title is more than 40 characters): 
   d. To be Cross-Listed\(^2\) with (Prefix and Number): 
   e. Courses must be described by at least one of the meeting patterns below. Include number of actual contact hours\(^3\) for each meeting pattern type.
   
   
   \[\begin{array}{cccccccc}
   \text{5 Lecture} & \text{Laboratory\(^1\)} & \text{Recitation} & \text{Discussion} & \text{Indep. Study} \\
   \text{Clinical} & \text{Colloquium} & \text{Practicum} & \text{Research} & \text{Residency} \\
   \text{Seminar} & \text{Studio} & 10 \text{ Other – Please explain:} \\
   \end{array}\]

   * The course will span the academic year; approximately 10 hr will be independent / on-line and 5 hr will be formal lecture & testing

   f. Identify a grading system: □ Letter (A, B, C, etc.) □ Pass/Fail
   g. Number of credits: 1
   h. Is this course repeatable for additional credit? YES □ NO □
      If YES: Maximum number of credit hours: ______
   i. Course Description for Bulletin:

   This course is designed to give the future physician an understanding of the role of nutrition in disease treatment and management. The overall goal of this course is to provide physicians with the training and background necessary to determine the nutritional requirements and /or recommendations for their patients in light of their current disease state. A key element of this course design will be to coordinate the nutrition topics with other Year Two Medical courses to further reinforce and apply their knowledge.

   Specific areas to be covered include the medical nutrition therapy for

---

\(^1\) Courses are typically made effective for the semester following approval. No course will be made effective until all approvals are received.

\(^2\) The chair of the cross-listing department must sign off on the Signature Routing Log.

\(^3\) In general, undergraduate courses are developed on the principle that one semester hour of credit represents one hour of classroom meeting per week for a semester, exclusive of any laboratory meeting. Laboratory meeting, generally, represents at least two hours per week for a semester for one credit hour. (from SR 5.2.1)
NEW COURSE FORM

cardiovascular disease, hypertension, obesity, diabetes, metabolic syndrome, gastrointestinal; renal, and osteoporosis.

Knowledge of these topic areas will be conveyed to the students through a combination of lectures, assigned readings, experiential assignments, on-line tutorials, cases discussions, knowledge application and analysis. This course is designed to be integrated with other Year Two Medical courses so as to reinforce and build upon their knowledge via a relevant context.

j. Prerequisites, if any: Satisfactory completion of Nutrition for Physicians I

k. Will this course also be offered through Distance Learning? YES ☐ NO ☒

l. Supplementary teaching component, if any: ☐ Community-Based Experience ☐ Service Learning ☐ Both

3. Will this course be taught off campus? YES ☐ NO ☒

4. Frequency of Course Offering.
   a. Course will be offered (check all that apply): ☒ Fall ☐ Spring ☐ Summer

b. Will the course be offered every year? YES ☒ NO ☐
   If NO, explain: ______

5. Are facilities and personnel necessary for the proposed new course available? YES ☒ NO ☐
   If NO, explain: ______

6. What enrollment (per section per semester) may reasonably be expected? 120

7. Anticipated Student Demand.
   a. Will this course serve students primarily within the degree program? YES ☒ NO ☐

   b. Will it be of interest to a significant number of students outside the degree pgm? YES ☐ NO ☒
   If YES, explain: ______

8. Check the category most applicable to this course:
   ☐ Traditional – Offered in Corresponding Departments at Universities Elsewhere
   ☒ Relatively New – Now Being Widely Established
   ☐ Not Yet Found in Many (or Any) Other Universities

9. Course Relationship to Program(s).
   a. Is this course part of a proposed new program? YES ☐ NO ☒
      If YES, name the proposed new program: ______

   b. Will this course be a new requirement for ANY program? YES ☒ NO ☐
      If YES, list affected programs: MD degree program

10. Information to be Placed on Syllabus.

   ☒ You must also submit the Distance Learning Form in order for the proposed course to be considered for DL delivery.
   ☒ In order to change a program, a program change form must also be submitted.
a. Is the course 400G or 500?

If YES, the differentiation for undergraduate and graduate students must be included in the information required in 10.b. You must include: (i) identification of additional assignments by the graduate students; and/or (ii) establishment of different grading criteria in the course for graduate students. (See SR 3.1.4.)

b. The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if applicable, from 10.a above) are attached.
NEW COURSE FORM

Signature Routing Log

General Information:

Course Prefix and Number: MD 825

Proposal Contact Person Name: Lisa Cassis, PhD Phone: 323-4993 ext 81400

Email: lcassis@uky.edu

INSTRUCTIONS:
Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

Internal College Approvals and Course Cross-listing Approvals:

<table>
<thead>
<tr>
<th>Reviewing Group</th>
<th>Date Approved</th>
<th>Contact Person (name/phone/email)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Ctr for Nutritional Science - Chair</td>
<td>2/26/2010</td>
<td>Lisa Cassis / 323-4993 ext 81400 / <a href="mailto:lcassis@uky.edu">lcassis@uky.edu</a></td>
</tr>
<tr>
<td>COM Curriculum Committee</td>
<td>3/15/2010</td>
<td>Darrell Jennings 7-5286 <a href="mailto:cdjenn@uky.edu">cdjenn@uky.edu</a></td>
</tr>
<tr>
<td>COM Faculty Council</td>
<td>3/16/2010</td>
<td>Martha Peterson 7-5478 <a href="mailto:mlpete01@uky.edu">mlpete01@uky.edu</a></td>
</tr>
<tr>
<td>COM Dean</td>
<td></td>
<td>Jay Perman 8-6582/japerm2@uky.edu</td>
</tr>
<tr>
<td>HCCC</td>
<td></td>
<td>Signature</td>
</tr>
</tbody>
</table>

External-to-College Approvals:

<table>
<thead>
<tr>
<th>Council</th>
<th>Date Approved</th>
<th>Signature</th>
<th>Approval of Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate Council</td>
<td></td>
<td></td>
<td>University Senate Approval</td>
</tr>
<tr>
<td>Graduate Council</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Care Colleges Council</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senate Council Approval</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments:

---

6 Councils use this space to indicate approval of revisions made subsequent to that council's approval, if deemed necessary by the revising council.
Course Syllabus for:

**MD 825 Nutrition for Physicians II**

**Course Location:** College of Medicine/Blackboard  
**Course Instructors:** Lisa Cassis, Ph.D.  
**Office:** 521 B CT Wethington Bldg  
**Office hours:** TBA

**COM GOALS & OBJECTIVES:**  
**Goal 1: Patient care**  
- Students must demonstrate skills in the core set of activities required for patient care including compiling and interpreting a patient history, performing a physical examination, understanding the appropriate use and interpretation of procedures and tests, and understanding the cultural perspectives of the patient.  
- Students must acquire the skills to be highly resourceful and understand complex and culturally sensitive relationships.  
- Students must develop the attitude necessary for the provision of patient care that is compassionate, appropriate, and effective.

**Goal 2: Medical knowledge**  
- Students must acquire knowledge in basic and clinical sciences related to the study of medicine.  
- Students must know how to acquire and analyze the information necessary for the proper diagnosis and treatment of patients and the promotion of their health.  
- Students must locate, appraise, and assimilate information from the scientific literature, and use information technology optimally for learning and participate in the education of patients, their families, and others.

**Goal 3: Practice-based learning and improvement**  
- Students must know how information is renewed and understand the ever-changing nature of medicine.  
- Students must develop lifelong learning and continuous self-assessment abilities.  
- Students must develop the fundamental skills of self-evaluation and lifelong learning including specifically, the ability to identify strengths, deficiencies, and limits in their knowledge, skills, and attitudes.  
- Students must analyze performance and incorporate formative feedback into improvement activities.

**Goal 4: Interpersonal and communication skills**  
- Students must develop the interpersonal and communication skills necessary for the effective exchange of information and collaboration with patients, their families, and other health professionals including the ability to communicate effectively across a broad range of socioeconomic and cultural backgrounds.  
- Students must demonstrate the ability to listen to patients and understand their experiences in the context of the patients’ beliefs, values, and personal circumstances.  
- Students must examine their own reactions and emotions influence their attitudes and behavior toward their patients.  
- Students must function effectively as members or leaders of a health care team.

**Goal 5: Professionalism**  
- Students must demonstrate and maintain a commitment to professional responsibilities and adherence to ethical principles including, but not limited to, compassion, honesty, integrity, and respect for others; responsiveness to patients’ needs superseding self-interest; respect for patient privacy and autonomy; accountability to patients, society, and the profession; and sensitivity, as well as responsiveness, to diverse individuals.  
- Students must act as role models committed to self-assessment and be willing to acknowledge errors.

**Goal 6: Systems-based practice**  
- Students must develop basic knowledge of health systems and the larger context of health care including the various health care delivery settings and systems, basic elements of cost analysis, risk-benefit analysis, and population-based care.  
- Students must demonstrate an awareness of the various systematic approaches to reduce medical errors and how to implement system solutions.  
- Students must effectively access and utilize outside resources.
COURSE OBJECTIVES: This course is designed to give the future physician an understanding of the role of nutrition in disease treatment and management, building on the knowledge and patient history taking skill acquired in Nutrition for the Physicians I. The overall goal of this course is to provide physicians with the training and background necessary to determine the nutritional requirements and/or recommendations for their patients in light of their current disease state, that is: applied nutrition. A key element of this course design will be to coordinate the nutrition topics with other Year Two Medical courses to further reinforce and apply their knowledge.

COURSE DESCRIPTION: Specific areas to be covered include the application of nutritional science to the medical therapy for obesity, cardiovascular disease, hypertension, diabetes, metabolic syndrome, gastrointestinal disorders, renal disorders, and osteoporosis.

Knowledge of these topic areas will be conveyed to the students primarily through on-line modules/tutorials, assigned readings following an initial overview lecture. Web-site discussions and/or clinical scenarios using a team-based learning approach will be utilized facilitate the learning process in a guided, self-paced fashion. Assessment will be focused on the students’ application of clinical nutrition knowledge. The course topics are designed to be integrated with other Year Two Medical course topics so as to reinforce and build upon their knowledge through a relevant context.

LECTURE AND EXAMINATION SCHEDULE:

Each topic is equivalent to approximately 2 hours of student time as on-line module lecture, case discussion/application of knowledge, or experiential assignment. Schedule will be dependent on other Year 2 Medical Courses so as to reinforce and build on knowledge:

1) Obesity (during ICM 2 in Fall)
2) Cardiovascular Disease (Dec/Jan)
3) Hypertension (Dec/Jan)
4) Renal (Jan/Feb)
5) Gastrointestinal (Mar)
6) Diabetes (Mar/Apr)
7) Metabolic Syndrome (Mar/Apr)
8) Osteoporosis/Bone (Apr)
9) Nutritional Support Options (Parenteral & Enteral) (Mar/Apr)
**Section I: OBESITY, CARDIOVASCULAR DISEASE, HYPERTENSION:**

A. The Pathophysiology of Obesity
   **Pedagogy:** MD825 Blackboard (BB) Module (~20 min self study) followed by evidence-based and patient-centered clinical medicine lecture and discussions
   **Completion:** during ICM 2 in Fall

B. The Pathophysiology of Cardiovascular Disease
   **Topics:** Overview and pathogenesis of inflammation and atherogenesis related to nutrition/lifestyle. Prevention, non-pharmacological/pharmacological treatment.
   **Pedagogy:** MD825 Blackboard (BB) Module (~20 min self study) followed by evidence-based and patient-centered clinical medicine lecture and discussions
   **Completion:** Dec/Jan

C. The Pathophysiology of Hypertension
   **Topics:** Classification. Treatment: medical/nutritional (DASH) management.
   **Pedagogy:** MD825 Blackboard (BB) Module (~20 min self study) followed by patient-centered clinical approach to enhance the patient-doctor relationship
   **Completion:** Dec/Jan

**Assessment of Section I:**
**Topic A:** Behavior Change Project – each student will identify an aspect of their diet that needs improvement and design a viable strategy to change it. Example: eating 5-9 fruit/day, cut back soft drinks, lose 5 lb, exercise 3 times a week. Start a journal.
Due at the end of Section I................................................................. (10% grade)
**Topic B&C:** Design a clinical assessment questionnaire to enhance patient-doctor relationship Due at the end of Section I................................................................. (10% grade)

**Section II: RENAL and GASTROINTESTINAL:**

A. Renal Disease and Nutrition:
   **Topics:** Renal Physiology. Regulation of salt and water. Vitamin D. Clinical and Biochemical Parameters of Renal Disease. Evaluation/symptoms/pharmacology. Renal diets.
   **Pedagogy:** MD825 Blackboard (BB) Module (~20 min self study) followed by lecture and discussion of nutritional parameters in renal diets.
   **Completion:** Jan/Feb.

B. Gastrointestinal Disorders and Nutrition:
   **Topics:** Digestion and Absorption. Nutrition in GI disorders (IBD, pancreatitis, celiac disease, short bowel syndrome & NAFL). Evaluation, symptoms and/or management
   **Pedagogy:** MD825 Blackboard (BB) Module (~20 min self study) followed by evaluation of nutritional status in GI disorders lecture and discussions
   **Completion:** March

**Assessment of Section II:**
**Topic A:** Renal diets are restrictive for any patient group. Identify a renal dietitian and discuss implementation and compliance of a specific renal diet. Present to peers.
Section III: DIABETES and THE METABOLIC SYNDROME:

A. Diabetes:
Pedagogy: MD825 Blackboard (BB) Modules (~20 min activity slides). This topic will be interactive. Students will have to view the activity slides and answer few questions. The correct answers will be revealed and discuss in class in team workshops.
Completion: March/April

B. Metabolic Syndrome:
Pedagogy: MD825 Blackboard (BB) Module (~20 min self study) followed by lecture and discussions about the impact of nutrition and exercise.
Completion: March/April

Assessment of Section III:
Topic A: Multiple choice questions from activity slides and workshops themes.
At the end of Topic A......................................................................................... (10% grade)
Topic B: Hands on BMI calculation, Ideal Body weight, Basal Energy Expenditure Framingham CV Risk, Anion Gap, Bicarbonate Deficit
At the end of Topic B..................................................................................... (5% grade)

Section IV: OSTEOPOROSIS and NUTRITIONAL SUPPORT OPTIONS:

A. Bone/Osteoporosis:
Pedagogy: MD825 Blackboard (BB) Modules (~20 min self study) followed by lecture and discussions of the dietary calcium and vit D requirements and supplementation.
Completion: April

B. Nutritional Support Options (Enteral/ Parenteral):
Pedagogy: MD825 Blackboard (BB) Module (~20 min self study) followed by lecture and hands on of Enteral access devices.
Completion: March/April

Assessment of Section IV:
Topic A: Short essay about best sources of Calcium, Vitamin D and ideas to correct deficiency that is clinically present in children and adults
At the end of Topic A..........................................................................................(5% grade)
Topic B: Short multiple choice questions from self-study and workshop. Hypothetical patient cases that require nutritional support
At the end of Topic B..........................................................................................(10% grade)
**ASSESSMENT (Examinations and Grading Policy):**

There will be two to four formative quizzes.
There will be one to two graded assignments during the course.
There will be a written, comprehensive Final Examination.

Relative point distribution:  
On-line Quizzes (2 - 4)  20 - 40%
Assignments (1- 2)   10 - 20%
Final Examination 40 -50%

Final grade distribution:  
A  89.5-100%
B  80-89.49%
C  69.5-79.99%
E  less than 69.49%

The grading scale may be curved at the end of the semester, at the discretion of the course director.

**STUDENT PROFESSIONALISM AND ACADEMIC INTEGRITY:**

Students are responsible for all materials and assignments.

**Academic Integrity, Cheating and Plagiarism**

In many cases, students who contemplate committing breaches of academic integrity are unaware of the seriousness with which the University views the offenses or of the potential consequences. The academic ombudsman has asked course directors to include the following directive in their syllabi: *According to rules adopted by the University Senate (Senate Rules 6.4.0 academic offenses policy), the minimum punishment for either of these offenses is a grade of 0 (zero, no credit) for the assignment in question. Additional punishments may be added if there are repeated instances of breaches of academic integrity as delineated in the Senate Rules noted above.*

**Classroom Behavior**

The course directors thank you in advance for your professional behavior, attention and courtesy to course instructors and fellow classmates. Behavior which detracts from the educational environment will not be tolerated. Cell phones should be turned off in the classroom. Students that arrive late to class should enter the classroom by the back door. Please notify the course director if problems should arise.