

University of Detroit Mercy School of Dentistry
DEPARTMENT OF BIOMEDICAL SCIENCES
Course Syllabus

Nutrition
DBS 801

Course Information

Web Address: <http://knowledge.udmercy.edu>

Course Directors:

Michael J. Gleason, PhD, DDS DC 432 Office Hours: Monday 7:30 - 8:30 AM and by appointment Phone: 494-6636 Email: gleasomj@udmercy.edu	
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Summer Term, 2008

DS2 Students (Class of 2011)

CB 2460, Wednesday 1:00-3:30 and Thursday 1:00-3:30

Credit Hours: 3

Prerequisites: Biochemistry/Molecular Biology DBS 820

Lecturers/Support Faculty

Lecturers:

Dr. Michael Gleason, Course Director

Dr. Virginia Merchant

Ms. Linda Rhodes-Pauley, MS, RD (contact through Dr. Gleason)

Preclinical/Clinical Faculty:

None

Academic Policies:

All policies in the School of Dentistry Academic Policies Handbook including but not limited to academic integrity, mandatory attendance, professional decorum & dress code, identification (ID) badges, preclinical and classroom decorum, use of cell phone and electronic devices, examination policies and exam/quiz absences apply.

Accommodations:

If you would like to request a classroom, testing, preclinical, clinical, or other accommodation because of a legally protected disability, or if you might require any special assistance in the event of an emergency or evacuation, please contact the University of Detroit Mercy's Office of University Academic Services (UAC) at 313-578-0310 or email your request for information to gallegem@udmercy.edu

Student Evaluation of Instruction

Student feedback is valued by the faculty and the administration. All students are required to complete the School of Dentistry's on-line course evaluation by a specified date. Failure to comply by posted deadline dates will result in the receipt of an F (Failing) grade of record for the Evaluation Responsibility Course. Only constructive, professional recommendations will be reported and considered.

Course Description

Purpose of the course:

This course is designed to acquaint the dental student with the basic concepts of nutrition. Proteins, carbohydrates, lipids, vitamins, and minerals as a source of energy and nutrient value will be presented. The role of carbohydrates in dental disease will be emphasized with a discussion of the classical epidemiological studies relating carbohydrates and dental caries. The effects of nutritional deficiencies and excesses will be discussed. Nutritive and non-nutritive sweeteners will be discussed. Topics covering nutrition through the life cycle, evaluation of popular nutrition reports, and food safety topics will bring together the basic concepts of nutrition and the basic science foundation. The effect of nutrition on oral, as well as overall, health and disease will be an integral part of the course.

Course Goals:

The goals of the Nutrition course are to:

- Provide students with the knowledge of the roles carbohydrates, lipids and proteins in human nutrition
- Provide students with the knowledge of the needs and roles of vitamins and minerals in human nutrition.
- Provide the student with an understanding of the role of nutrition in quality of life and dental health.
- Provide the student with the knowledge required and the reliable sources of information to evaluate nutritional claims for their patients.

Course Objectives:

At the conclusion of the course, the dental student should have a knowledge of:

Protein requirements and when needs are increased.

The importance of consuming a diet with appropriate amounts of protein, carbohydrates and lipids.

Basics of eating disorders and the oral changes seen in patients with these disorders.

The basics of diet counseling and the importance of healthcare providers providing nutritional information to their patients.

How to recognize false and miss leading nutritional claims, as well as, the sources for obtaining accurate information.

Instructional Methods:

Instructional methods utilized in this course include lecture and class participation exercises. The opportunity for out of class time question and, if requested, review sessions will also be provided.

School of Dentistry Competencies

Competency-based Education: Assumes that learning to become an entry-level professional is a progression through stages from novice to competent.

Stages of Progression to Competence:

F or Foundation Knowledge: Basic knowledge, skills, and attitudes needed to begin the journey to competence.

N or Novice Level: Ability to articulate or describe the appropriate skills, knowledge, and professional attitudes. Novices need structure, clarity of goals, single and clearly explained approaches.

B or Beginner Level: Combines the appropriate skills, knowledge, and professional attitudes, all of which are performed with guidance and correction.

C or Competent Level: Combines the appropriate supporting skills, knowledge, and professional attitudes, all of which are performed reliably without assistance.

	Competencies of the Graduating Dental Student	Addressed	Evaluated	Method
1.	The graduating student obtains, records, updates and organizes accurate and completed medical/dental histories including pertinent psychological and socioeconomic information.	YES	F	WRITTEN
2.	The graduating student performs, records and organizes a physical assessment appropriate for dental care.	YES	F	WRITTEN
3.	The graduating student determines differential, provisional or definitive diagnoses by correlating and interpreting examination and assessment findings.	NO	NO	NA
4.	The graduating student develops alternative treatment plans which are sequenced to address the chief complaint, eliminate oral disease, restore function, and maintain health, and prevent oral disease consistent with assessment and diagnoses.	NO	NO	NA
5.	The graduating student establishes with the patient a mutually acceptable treatment plan.	NO	NO	NA
6.	The graduating student monitors and provides for patient comfort associated with dental care.	NO	NO	NA
7.	The graduating student delivers and/or manages the planned treatment in sequence and in accordance with accepted standards of care.	NO	NO	NA
8.	The graduating student promotes health maintenance and disease prevention.	YES	F	WRITTEN
9.	The graduating student applies the principles of infection control and environmental safety.	NO	NO	NA
10.	The graduating student makes professional decisions affecting the practice of dentistry based on values that satisfy legal and ethical principles and service to society.	NO	NO	NA
11.	The graduating student performs routine self evaluation.	NO	NO	NA
12.	The graduating student applies business and practice management skills.	NO	NO	NA
13.	The graduating student demonstrates interpersonal skills to function successfully in a multicultural work environment.	NO	NO	NA
14.	The graduate critically evaluates the validity of new information, new products, and/or techniques and their relevance to the practice of dentistry.	YES	F	WRITTEN

Course Policies

If you are late for class please wait for a pause in the lecture to take a seat, also turn off all cellular phones and audible pagers during lecture. Drinking and eating during lecture are allowed as described in the School policies covering these activities.

Student evaluation will be based two section examinations, a final comprehensive examination, a five day diet analysis, and participation. The diet analysis and participation will be weighted the same. Scores on examinations will be reported as number correct on exam with a projected final grade posted after each examination based on current completed examination scores. The final grades for the course will be determined by converting exam grades to a Z-score and the Z-score will be used to determine the percentage grade for each exam. The percentage will be calculated by adding 80% to the product of the student's Z-score times 10% or the examination standard deviation using which ever value is smaller. If an

examination's average grade is above 80% the examination average will be used in the calculation, no adjustment downward will be made for that examination.

Details of the diet analysis and use of the required software are in a separate handout and available on the course web site.

Following the first examination and each subsequent examination, as noted above, the Blackboard site will contain an estimate of your current letter grade standing.

Examinations will be composed of true/false, multiple choice, "multiple-multiple choice", and/or short answer questions. **Questions will be drawn from the assigned readings and the lecture material.**

Missed examinations may be made up if the absence was for good and sufficient reason. Format and timing of the make up exam will depend on the length of time after the original exam date that the make up is taken. Examinations will **not be returned** students may review their examination during office hours.

All examinations are less than one hour and you are not allowed to leave the room before you have finished your examination. Once you have entered the room you may NOT talk. During examinations all books, bags, papers, and electronic devices will be placed at the sides of the room unless otherwise instructed. All electronic devices must be turned off. Should you have a documented medical condition which may necessitate leaving during the examination, inform the course director at least **two days prior** to the examination so that arrangements may be made. No questions of interpretation or meaning will be answered during examinations.

The use of the PRS "clickers" will be account for 10% of the final grade. Each lecture period will be assigned participation points. During the lecture questions will be asked which require answering via the CPS transmitter, the percentage of responses a student makes relative to the maximum number will be used to determine the number of participation points awarded the student for the lecture. **Failure to bring the PRS to class, having dead batteries, or not logging in, REGARDLESS of the reason, will be interpreted as a lack of participation and result in ZERO participation points for the lecture.**

All other policies not mentioned here but appearing in the *University of Detroit Mercy School of Dentistry Academic Policies Handbook* apply, where applicable, to this course. When taking examinations please note that the *University of Detroit Mercy School of Dentistry Academic Policies Handbook* states that "Failure to acknowledge assistance that a student received from a fellow student ... will be regarded as an instance of plagiarism." Using another students PRS transmitter to log in or to respond to questions will be regarded as Academic Misconduct. If the individual or individuals involved are identified they will, at a minimum, receive a zero participation grade for the ENTIRE COURSE and the appropriate administrative report will be submitted. This type of activity is viewed by the Course Director, and most faculty members, as a serious breach of the code of professional conduct and as such reflects very poorly on a student's fitness for the profession.

Textbook and Resource Materials

No specific required text for this course.

Links to assigned web sites/readings will be posted on the Course web site which should be checked regularly for the current reading assignments. Handouts will also be used to supplement the online materials.

Evaluation and Grading

Grading Scale

A	=94-100%
A-	=90-93%
B+	=87-89%
B	=83-86%
B-	=80-82%
C+	=77-79%
C	=73-76%
C-	=70-72%
D	=60-69%
F	=below 60%
W	Withdraw, no credit
I	Incomplete, a temporary grade not of record

Course Grade Components

First examination	The three examinations
Second examination	are equally weighted
Final Examination	and will comprise 80%
	of the final grade
Diet analysis	10%
Participation	<u>10%</u>
	100%

Course Evaluation Methods

Quizzes

No quizzes are planned for this course.

Section Examinations

Will cover the material specified in class the week prior to the examination.

Final Examination

Will cover any material since the previous examination (approximately 30 questions) plus the previously tested material (approximately 20 questions).

Projects

Five day personal diet analysis will be required using the FoodWorks program for the analysis. A written evaluation of your diet, based on the analysis provide by the program will be required.

Rotations

None

COURSE SCHEDULE

Class is in CB 2460 from 1:00 to 3:30.

Readings will be posted on the course Blackboard site with links to any additional materials.

Date	Time	Topic	Lecturer
Wed 5-21	1:00-3:30	Introduction/Metabolism	Dr. Gleason
Thu 5-22	1:00-3:30	Diabetes	Dr. Gleason
Wed 5-28	1:00-3:30	Protein	Dr. Gleason
Thu 5-29	1:00-3:30	Lipids	Dr. Gleason
Wed 6-4	1:00-3:30	Vitamins	Dr. Gleason
Thu 6-5	1:00-3:30	Vitamins	Dr. Gleason
Wed 6-11	1:00-3:30	Carbohydrates	Dr. Merchant
Thu 6-12	1:00-2:00	Exam 1 (Through Vitamins)	
Wed 6-18	1:00-3:30	Dental aspects of nutritive and nonnutritive sweeteners	Dr. Merchant
Thu 6-19	1:00-3:30	Water/Minerals	Dr. Gleason
Wed 6-20	1:00-3:30	Alcohol	Dr. Gleason
Thu 6-26	1:00-3:30	Eating disorders; Diet counseling	Ms. Rhodes-Pauley
Wed 7-2	1:00-3:30	No class	
Thu 7-3	1:00-3:30	No class	
Wed 7-9	1:00-3:30	No class	
Thu 7-10	1:00-2:00	Exam 2 (through 6-26 class)	
Wed 7-16	1:00-3:30	Pre/Probiotics (Project due electronically by 5PM)	Dr. Gleason
Thu 7-17	1:00-3:30	Weight control/Supplements	Dr. Gleason
Wed 7-23	1:00-3:30	Herbals/Health claims	Dr. Gleason
Thu 7-24	1:00-3:30	Food safety/Fads and Fallacies	Dr. Gleason
Final Examination date and time to be announced			