

BERGEN COMMUNITY COLLEGE
SCHOOL OF HEALTH PROFESSIONS
DENTAL HYGIENE DEPARTMENT

STUDENT COURSE OUTLINE

COURSE TITLE: DHY-214 - NUTRITION IN DENTAL HEALTH
RM: HP-325 TIME: 9:25-11:05
Online Component

INSTRUCTOR: Associate Professor:

OFFICE HOURS:

COURSE CREDIT: 2 CREDITS, 2 LECTURE HOURS

PREREQUISITES: CHM-112, DHY-200, 202, 204, 206, 207, 219, and 220

COURSE DESCRIPTION:

Nutrition in Dental Health will explore basic concepts of nutrition as they apply to general and oral health. Students will learn to identify clinic patients with dietary and nutritional deficiencies, provide nutritional counseling treatment plans, and adapt behavioral modification techniques.

COURSE OBJECTIVES:

Upon completion of this course, the student will be able to:

1. Explain the Describe the general physiological functions of the six nutrient classifications.
2. Assess the dietary intake of a patient, using the *Dietary Guidelines for Americans and MyPlate*.
3. Explain the role of biochemistry in dental hygiene and nutrition with intertwining topic areas, to cover: Energy and Matter, Compounds and Their Bonds, Intro. to Organic Chemistry: Alkenes, Isomers, Alcohols, Aldehydes, Ketones, Amines and Amides, Carbohydrates, Amino Acids and Proteins, Enzymes and Vitamins, Lipids, and Nucleic Acids and Protein Synthesis
4. Describe the function and daily requirements of fats, carbohydrates, proteins, vitamins, and minerals in preventing disease and maintaining health.

Spring

5. List the food groups and the daily recommended servings for each.
6. Describe the relationship between fermentable carbohydrates and dental caries.
7. Describe the role of fluoride in preventing and controlling dental caries.
8. Recognize clinical signs and symptoms of nutritional deficiencies and excesses; describe prevention and treatment.
9. Name specific nutritional health risks associated with particular stages of the life cycle, i.e. childhood, pregnancy, elderly.
10. Identify an appropriate patient for nutritional counseling, develop a dietary treatment plan, and accurately assess the results.

Teaching Methods

The following teaching methods will be utilized in this course:

1. Lecture
2. Discussion
3. Power Point Presentations
4. Review of handouts
5. DVD/Videos
6. Photographs
7. Diagrams/Tables/Physical Demonstrations Relative To Course Content
8. Web enhancement through Moodlerooms 2X, Clickers

Learning Experiences/Activities

The following learning experiences and activities will be utilized in this course:

1. Analysis of all patient data/assessments to formulate a dental hygiene nutritional counseling program to cater to individual client needs
2. Visual, auditory, sensory, and tactile assessments of patients being screened for nutritional counseling and advising
3. Discussion and documented advise from various nutritional counseling experts- including specialists from dietician settings and alternative/homeopathic settings
4. Evaluation of nutritional counseling patient's response to treatment during dental hygiene clinical appointments, and throughout subsequent visits
5. Visiting and/or exploring alternative restaurant/dietary programs to enhance student dietary report outcomes
6. Journaling of clinical and additional experiences through Moodlerooms, and classroom presentations to include either: power point presentation, lecture, clickers in the classroom/review questions, and visual outcomes

CORE COMPETENCIES:

Spring

- C.1 Apply a professional code of ethics in all endeavors.
- C.3 Use critical thinking skills and comprehensive problem- solving to identify oral health care strategies that promote patient health and wellness.
- C.4 Use evidence-based decision making to evaluate and incorporate emerging treatment modalities.
- C.6 Continuously perform self-assessment for lifelong learning and professional growth.
- C.7 Integrate accepted scientific theories and research into educational, preventative, and therapeutic oral health services.
- C.9 Apply quality assurance mechanisms to ensure continuous commitment to accepted standards of care.
- C.10 Communicate effectively with diverse individuals and groups, serving all persons without discrimination by acknowledging and appreciating diversity.
- C.11 Record accurate, consistent, and complete documentation of oral health services provided.
- C.12 Initiate a collaborative approach with all patients when developing individualized care plans that are specialized, comprehensive, culturally sensitive, and acceptable to all parties involved in care planning.
- C.13 Initiate consultations and collaborations with all relevant health care providers to facilitate optimal treatments.

HEALTH PROMOTION AND DISEASE PREVENTION (HP)

- HP.1 Promote positive values of overall health and wellness to the public and organization within and outside the profession.
- HP.2 Respect the goals, values, beliefs, and preferences of all patients.
- HP.4 Identify individual and population risk factors and develop strategies that promote health related quality of life.
- HP.5 Evaluate factors that can be used to promote patient adherence to disease prevention and/or health maintenance strategies.

COMMUNITY INVOLVEMENT (CM)

- CM.2 Provide screening, referral, and educational services that allow patients to access the resources of the health care system.
- CM.3 Provide community oral health services in a variety of settings.
- CM.7 Advocate for effective oral health care for underserved populations.

PATIENT/CLIENT CARE (PC)

Assessment

- PC.1 Systematically collect, analyze, and record data on the general, oral,
Spring

psychosocial health status of a variety of patients/clients using methods consistent with medico- legal principles.

- PC.2 Recognize predisposing and etiologic risk factors that require intervention to prevent disease.
- PC.3 Recognize the relationships among systematic disease, medications, and Oral health that impact overall patient care and treatment

Diagnosis

- PC.5 Use patient assessment data, diagnostic technologies, and critical decision making skills to determine a dental hygiene diagnosis, a component of the dental diagnosis, to reach conclusions about the patient's dental hygiene care needs.

Planning

- PC.6 Utilize reflective judgment in developing a comprehensive patient dental hygiene care plan.
- PC.7 Collaborate with the patient and other health professionals as indicated to formulate a comprehensive dental hygiene care plan that is patient-centered and based on the best scientific evidence and professional judgment.
- PC.8 Make referrals to professional colleagues and other health care professionals as indicated in the patient care plan.

Implementation

- PC.10 Provide specialized treatment that includes educational, preventative, and therapeutic services designed to achieve and maintain oral health. Partner with the patient in achieving oral health goals.

Evaluation

- PC.11 Evaluate the effectiveness of the provided services, and modify care plans as needed.
- PC.13 Compare actual outcomes to expected outcomes, reevaluating goals, Diagnoses, and services when expected outcomes are not achieved.

PRIMARY TEXTBOOK:

Davis, Judi R. and Stegeman, Cynthia. The Dental Hygienist's Guide To Nutritional Care. 4th Edition, Elsevier/Saunders. Philadelphia, 2015.

Spring

SUPPLEMENTAL REFERENCES:

Wilkins, Esther M. Clinical Practice of the Dental Hygienist, 11th Edition. Williams and Wilkins., Philadelphia, 2013.

The websites below will be particularly helpful:

www.womenshealth.gov

www.DietaryGuidelines.gov/www.ChooseMyPlate.gov(current)

www.foodpyramid.com/*www.mypyramid.gov. (excellent)

www.cancer.org (substitute diabetes, stroke, osteoporosis, etc.)

www.eatright.org. / www.healthypeople.gov

*<http://evolve.elsevier.com/Stegman/nutritional/>

[american](http://www.american-dietetic.org) dietic association (ADA)

216 West Jackson Boulevard, Suite 800, Chicago, IL 60606-6995

(800)877-1600

<http://hni.ilsu.edu> IISI Human Nutrition Institute (HNI)

<http://dietary-supplements.info.nih.gov>

ADA, the nutrition line (800)366-1655

Professional conduct, class attendance, and completion of course assignments (see "Evaluation System") is expected.

LECTURE OUTLINE

(Subject To Change)

Reading assignments and the sequence of lectures and tests is as follows:

1. Overview of Nutrition and Dietary Habits, Digestion- Chapter 1,3
Concepts of Biochemistry (General Overview-online/class required
Chapter 2, Chapters : 3, 4, 5, 6, 8, 9, 11, 12, and 18 also go into generalizations
relating to Biochemistry weekly. See Lecture #2: Biochemistry objectives and
reading requirements)
2. General Carbohydrates: The Efficient Fuel- Chapter 4
Obesity & Diabetes
3. Carbohydrates and Dental Caries - Chapter 18
4. Protein; malnutrition and anorexia - Chapter 5
5. **EXAM 1**
Lipids: The Condensed Energy- Chapter 6
6. Vitamins That Form Calcified Structures - Chapter 8

Spring

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| 7. | Minerals That Form Calcified Structures - | Chapter 9 |
| 8. | Fluoride- Requirements, Role, and Application | Chapter 9
p. 170-174 |
| 9. | Vitamins Required For Soft Tissue Structures - | Chapter 11 |
| 10. | EXAM 2
Water & Minerals Required For Soft Tissue Structures- | Chapter 12 |
| 11. | Nutritional Requirements Affecting Oral Health
In Women- | Chapter 13 |
| 12. | Other Considerations Affecting Nutrient Intake | Chapter 16 |
| 13. | Effects of Systemic Disease on Nutritional Status-
And Oral Health (TBA) | Chapter 17 |
| 14. | Nutritional Assessment and Dietary Counseling -
EXAM 3 | Chapter 21,
Wilkins –
Chapter 34 |
| 15. | Nutritional Project Presentations | |

EVALUATION SYSTEM

The final grade will be determined by:

Examinations (3)

90% Test dates-subject to change:

Nutritional Counseling Patient Project

10% Topic approval due date:

Moodlerooms drop-off box:

5-6 Minute Presentations on:

If you miss an exam, due to extenuating circumstances, you must either: call the Dental Hygiene Office (447-7937) or call Instructor's office number, Moodleroom the instructor or send an email to professor within 24 hours. Failure to do these steps will result in a zero grade. The "make up" exam will be scheduled at the instructor's convenience and a different test format may be used.

DENTAL HYGIENE PROGRAM GRADING SYSTEM:

A	-	92 - 100
B+	-	89 - 91
B	-	83 - 88
C+	-	80 - 82
C	-	75 - 79
F	-	below 75

Spring

Students must achieve a passing grade of 75 or better to meet course and program requirements.

Academic Conduct

- ❖ The Dental Hygiene Faculty adheres to the policy statement governing academic conduct as outlined in the Bergen Community College Catalog.
- ❖ Faculty may not post exams grades due to privacy laws.
- ❖ Faculty reserves the right to alter test dates, in order to accommodate course changes as deemed necessary.
- ❖ Faculty reserve the right to delay the return of exam grades until all students have taken the exam and faculty review of the exam has been completed.
- ❖ Cheating, plagiarism and unethical behavior will **NOT** be tolerated. Any student who has demonstrated any of the above behaviors will be disciplined according to College procedures.
- ❖ Cell phone use is not permitted during classroom/examination time. And no computer use on lectures or continuous side-bar discussions tolerated unless encouraged during the lecture time.
- ❖ Excessive talking will not be tolerated in the classroom! The disruptive student(s) will be told to leave the classroom after first warning. Missed classroom information and materials can be obtained from a fellow student and not through the instructor/professor.
- ❖ No discussions are permitted once students are seated for an examination. Faculty may dismiss a student who chooses not to comply with this policy.
- ❖ Students are not permitted to work on classroom equipment or computer
- ❖ Students are expected to be present for every scheduled examination.
- ❖ Children are not permitted in the classroom during class time

Academic Honesty

- ❖ A student must always submit work that represents his or her original words or ideas and complete all in class assessments (tests, quizzes, etc.) without any collaboration.
- ❖ Failure to adhere to this policy will result in a grade of zero for the assessment in question (assignments, tests, quizzes, etc.)

Progression Requirement

- ❖ A student must complete the Dental Hygiene Program within **(4)** four **consecutive** years from enrollment in the Dental Hygiene program.
- ❖ Two course failures prohibit the student from progressing in the program. A student shall be permitted to request, through the Dental Hygiene Program Appeal Process, an additional opportunity to repeat a course.
- ❖ All dental hygiene students who are withdrawing "W" from a Dental Hygiene course(DHY) or have received a failing "F" grade in any course **MUST NOTIFY** the Dental Hygiene Department Chair about in writing about their intention to repeat the course, if eligible.
- ❖ All core DHY courses **MUST** be taken in sequential order within the Bergen Community College Dental Hygiene Program. **NO** DHY courses may be transferred or taken at any other Dental Hygiene Program.
- ❖ General science and education pre and co-requisites must be fulfilled as listed in the course sequence of the college catalog and program brochure.
- ❖ It is the responsibility of the individual student to review prerequisites for each course prior to registration.

Course Grade Appeal Policy

- Bergen Community College's appeal policy states:
 1. A student raising a complaint or concern about a course grade may discuss the matter with the individual faculty member no later than the first two weeks of the semester, immediately following receipt of the grade.
 2. If the grade appeal is not resolved, the student may bring the matter to the appropriate department head within two weeks of discussion with the instructor.
 3. The department head will investigate the appeal and attempt to resolve the matter as expeditiously as possible. The department head will notify the student either in writing or orally of the result.
 4. If the appeal is not resolved, the student may put the appeal in writing, attaching copies of any supporting information and send it to the appropriate divisional dean within two weeks of hearing from the department head.

Spring

5. The divisional dean may consult other faculty in the discipline and the department head and may choose to meet with the student. The dean will notify the student in writing of the resolution. A grade appeal is sometimes a lengthy process and may take several weeks to resolve at this stage. Every effort will be made to notify the student within one month.
6. After receipt of the dean's written response, a student may continue the appeal process by writing to the Academic Vice President. The student should attach copies of all previous correspondence regarding the appeal and copies of supporting documentation.
7. The Academic Vice President will consult all parties involved in the appeal process and may choose to meet with the student. Grade appeals may also take several weeks to resolve at this stage.
8. The Academic Vice President will notify the student in writing of the results of the appeal. Every effort will be made to notify the student within one month.

Absence/Punctuality

- ❖ Bergen Community College's attendance policy states: "All students are expected to attend punctually every scheduled meeting of each course in which they are registered. Attendance and lateness policies and sanctions are to be determined by the instructor of each course. These will be established in writing on the individual course outlines."
- ❖ It is the student's responsibility to be on time for all classes. **One to Five Points** will be deducted from final grade for tardiness, (faculty discretion); if a student exceeds more than **"2" times late to class**.
- ❖ Please note that attendance is critical to successful completion of the program. Unexcused absences will also be factored into the **One to Five Point Deduction**, (faculty discretion); if a student fails to inform instructor via: office phone message, instructor e-mail, Moodlerooms and/or department secretary. ***All students who miss a class, are responsible for obtaining class content and information on their own. Remember, only ONE absence from class permitted per semester.**
- ❖ Remember, in the event of an emergency, illness and/or inclement weather; all students **must** contact the instructor and/or department secretary **prior** to class. Resources to contact are: Moodlerooms, (don't just count on the site), department secretary, instructor e-mail & phone. **Do Not** leave messages on the clinic phone to report absences.

Absence of an Instructor

As noted in the Bergen Community College catalog: "Students are expected to wait twenty (20) minutes. If at the end of 20 minutes the faculty member does not come, the students should sign an attendance sheet which indicates course, date, and time. One student should deliver the attendance sheet to the dental hygiene office. Students cannot be penalized by faculty for not waiting longer than 20 minutes". *It is highly recommended that students check course announcements in Moodlerooms considering class: assignments, concerns or cancellations by instructor, as well.

Emergency School Closings

If the College is closed due to inclement weather or for any other reason please refer to one of the following:

Log on to the College's website: <http://www.bergen.edu>

- ⇒ Call the College's main telephone number (201)447-7100.
- ⇒ Visit <http://newyork.cbslocal.com/school-closings/> at 1010 WINS to sign up for email or text message notification of the College closing.
- ⇒ Listen to radio stations: WCBS/880, WOR/710, 1010 WINS, WVNJ 1160
- ⇒ Watch TV Cablevision/News 12 NJ

Student Support Services

Students are encouraged to use the student support services provided by the college. These services include the Tutoring Center (L-125) and the Office of Specialized Services (S-131). Every effort will be made to ensure classroom and laboratory access for all students. Students who require accommodations in accordance with the Americans with Disabilities Act (ADA) can request these services from the Office of Specialized Services. To learn more about how to apply for services, please visit them at: <http://www.bergen.edu/oss>.

DATE	TOPIC	TEXT	CORE COMPETENCIES
	Overview of Nutrition and Dietary Habits, Digestion Biochemistry (refer to Objectives)	CH. 1,2 CH.'s: 1,2,4,5,6,7,8	C 1-5, 7, 9, 10, HP 5 “ “ <u>Ibid.</u> and PC.2, PC.5 and PC.13
	General Carbohydrates: The Efficient Fuel- Obesity & Diabetes	Ch. 3	C 1- 7, 10, 11, 12, HP 1- 5, CM 2, 3, 7, PC 1-3, 5, 8, 10, 11, 13
	Carbohydrates and Dental Caries	Ch. 17	C 1-7, 10, 11, 12, HP 1- 5, CM 2, 3, 7, PC 1-3, 5, 8, 10, 11, 13
	Protein: Malnutrition and Anorexia	Ch. 4	C 7, 10, 12, 13, HP 5, CM 2, 3, 7, PC 1- 3, 5, 6- 13
	Lipids: The Condensed Energy	Ch. 5	C 7, 10, 12, 13, HP 5, CM 2, 3, 7, PC 1- 3, 5, 6- 13
	Vitamins That Form Calcified Structures	Ch. 7	C 7, 10, 12, 13, HP 5, CM 2, 3, 7, PC 1- 3, 5, 6- 13
	Minerals That Form Calcified Structures	Ch. 8	C 7, 10, 12, 13, HP 5, CM 2, 3, 7, PC 1- 3, 5, 6- 13
	Fluoride: Requirements, Role, and Application	Ch. 8	C 7, 10, 12, 13, HP 5, CM 2, 3, 7, PC 1- 3, 5, 6- 13
	Spring Break	TBA	Follow Assigned Readings
	Vitamins required For Soft Tissue Structures	Ch. 10	C 7, 10, 12, 13, HP 5, CM 2, 3, 7, PC 1- 3, 5, 6- 13
	Water & Minerals Required For Soft Tissue Structures	Ch. 11	C 7, 10, 12, 13, HP 5, CM 2, 3, 7, PC 1- 3, 5, 6- 13
	Nutritional Requirements Affecting Oral Health In Women	Ch. 12	C 7, 10, 12, 13, HP 5, CM 2, 3, 7, PC 1- 3, 5, 6- 13
	Other Consideration Affecting Nutrient Intake Effects of Systemic Disease on Nutritional Status and Oral Health	Ch. 15 Ch. 16	C 7, 10, 12, 13, HP 5, CM 2, 3, 7, PC 1- 3, 5, 6- 13 “ “
	Nutritional Assessment and Dietary Counseling	Ch. 20 Wilkins, Ch. 32	C 1-13, HP 1-5, CM 2, 3, 7, PC 5, 10, 11, 13
	Nutritional Project Presentations		C 1-13, HP 11-5, CM 2, 3, 7, PC 5, 10, 11, 13
Tests			

Spring

STUDENT ACKNOWLEDGEMENT

I, _____ have read and understood the syllabus for course DHY 214 – Nutrition in Dental Health and agree to abide by the protocols and requirements set forth in this syllabus, in the Bergen Community College Dental Hygiene Student Handbook, and the Bergen Community College Catalogue.

Student Signature/Date

Faculty Signature/Date