# Kingsborough Community College of The City University of New York Department of Biological Sciences 718-368-5502

# Biology 70: The science of Nutrition, 3 credits/3 hours

Instructor: Jacqueline Andrawis Jacqueline.Andrawis@kbcc.cuny.edu

# **Course Information**

This course satisfies college requirements for a Group V science course. It does not meet CPI requirements for credit in the science area. This course is not required for Biology majors nor can Biology majors use this course as credit toward the biology major.

## **Course Description**

Biology 70 presents the principles of nutritional science and does not require previous science background. Biological and chemical principles are explained and applied to nutritional science as required. The course begins with an introduction to basic nutritional principles and the systems organization of the human body. Study of the anatomy and physiology of the digestive system follows. Nutrients are then considered sequentially - water, carbohydrates, lipids, protein, vitamins, and minerals. Discussions of body weight maintenance and loss, healing, common diseases, herbs, pregnancy diets, athletic nutritional needs, environmental contamination of the body, and current nutritional advertising occur in the context of each major course area. Students are encouraged to ask questions; those of general interest will be covered in the discussion board; those of a more personal nature will be deferred and answered privately by emails.

Successful completion of the course requires passing the unit examinations, submission of journal report, an analyzed personal diet survey, chapter activities, posting in the discussion board and passing the final examination.

The course will be taught asynchronously, which give you flexibility to design your own learning schedule and will allow you to access the course materials, participate in the board discussions, and work in groups at any time that is convenient to you. You can use a computer or a tablet. You can download the blackboard app on your phone and navigate the course.

The BIO70 course officially starts on Monday, September 14, and ends on December 11.

### **Instructor Contact information**

Email: Jacqueline.andrawis@kbcc.cuny.edu

Office hours:

Wednesday 5:00 pm - 7:30 pm online

This term will be virtual via blackboard collaborate by appointment or via emails. I will reply to your email within 24 hours.

#### Resources:

- An Introduction to Nutrition https://www.oercommons.org/courses/an-introduction-to-nutrition-v1-0/view
- Not mandatory/Optional: Boyle, M.A., and Long, S., <u>Personal Nutrition</u>, 9th Edition. ISBN: 978-1305110427

Articles will be posted on weekly basis in blackboard

### **Course Goals**

- 1. Develop the knowledge to select a diet healthy for now and for one's lifetime.
- 2. Apply the scientific method to investigate nutritional issues and evaluate food labels and claims.
- 3. Analyze the interactions of nutrients in the framework of the body's metabolic patterns.
- 4. To involve students in the study of current nutritional research efforts.
- 5. Analyze the influence of marketing forces on foods and supplements regarding consumer purchases.

# **Course Learning Outcomes**

- 1. List and describe the basic food components: proteins, carbohydrates, fiber, lipids, vitamins, minerals, and water.
- 2. Distinguish between a nutritional claim and a health claim on a food product label.
- 3. Describe how individual health is affected by nutritional status.
- 4. List and describe the types of disorders associated with altered nutritional status.
- 5. List at least four healthful strategies for eating at "fast food" establishments.
- 6. Explain how the media (TV, newspapers, magazines) influences our food choices.
- 7. Explain how the My Pyramid is used for healthy meal planning.
- 8. Describe the *Dietary Guidelines for Americans* and explain their purpose.
- 9. Recognize that fats and refined sugars can be obtained from almost any food group and that both the types and amounts of fats should be carefully controlled in order to eat a healthful diet.
- 10. Explain how you would determine the percent daily value for carbohydrates, fats and protein for a person on a 2000-calories-a-day diet.
- 11. Use the food composition tables on the website (www.mypyramid.gov) to determine; calories, grams of carbohydrates, fats and protein for a serving of a particular meal

## **Civility Statement**

- As an institution of higher education, Kingsborough Community College and its faculty and staff are committed to its entire student body. As such, we strive to interact with each student equitably and professionally while providing an environment of mutual respect and civility.
- In the event a student has an allegation charge brought against him/her that is a breach of the Henderson Rules to Maintain Public Order or the Campus Code of Conduct, an immediate investigation will commence followed by a conciliation conference to determine the appropriate outcome within a thirty day period.
- The Judicial Affairs process at Kingsborough Community College is critical in providing an agenda for safety, yet simultaneously offering protection of the rights of students who may have been accused of being in violation of the Henderson Rules to Maintain Public Order and/or the Campus Code of Conduct. These rights have been afforded to each Kingsborough student under the bylaws that were established in 1969.

# **Academic Integrity Policy**

 To reach academic success, one needs to uphold the 5 core values of honesty, trust, fairness, respect and responsibility. Failure to do so may result in charges of academic dishonesty. Academic dishonesty is prohibited by CUNY and Kingsborough Community College and is punishable by penalties, including

- failing grades, suspension, and expulsion. Examples of academic dishonesty include, but are not limited to, cheating, plagiarism, internet plagiarism, obtaining unfair advantages, and falsification of records.
- Plagiarism is the intentional use of another's intellectual creations without attribution (giving credit to the author). This is theft of materials from another author and is prohibited. Determination and penaltyranging from grade reduction to course failure is at the discretion of individual faculty members.

# Attendance Policies

• A grade of WU is to be assigned to students who attended a minimum of one class, completely stopped attending (submitting assignments and participating in the discussion board) at any time before final exam week and did not officially withdraw.

# **How Your Grade is Computed**

Assignment	Points
Welcome discussion forum	5
PBL Activities/Discussion Board	10
Journal report	10
Diet Analysis	10
Exams	4-
4 exams/drop 1 exam (with the lowest grade)	45
Final Exam	20
Total	100
Chapter activities: Extra credits	
1 point for each chapter will be added to one of the 3 exam grades (maximum	
of 10 points)	
Full description of each assignment will be posted on blackboard	
No credit for late discussion forum or discussion board Assignment	
No make up for the exams	

#### **Expectation of student participation**

- Every time you enter the course on blackboard spend a few moments to read the announcement to be updated on assignments or notifications. It is recommended that you log into blackboard at least three times a week and check your emails frequently to adhere to the due dates for assignments and read the notifications. You are expected to actively participate in the discussion and complete the assignments on weekly basis. Every Monday, I will post the assignments for that week.
- You need your CUNY first account to access blackboard and KBCC email account to check your emails.

### How the course is organized

- *Announcement:* announcement will be posted at the beginning of each week
- *Course content*: this section is divided into 12 weeks/units. Detailed description of the assignments for each week
- *Discussion Board*: PBL activities, respond to posted question and reply to a classmate
- Blackboard collaborate: live meeting
- My grade: all assignments grades are posted here; upcoming, submitted, and graded
- Blackboard help: link to CUNY blackboard support

During week 12 you will have examination #4 (ch.7,8,10)

Course	Outline
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Week	Topic	Textbook	
Reading	1 - 3	Basic Nutritional Concepts	Chapters 1,
2, and 3		•	•
	Digestive System		
	Basic Biology and Cher	nistry	
During week 4 you	will have examination #1 (ch.1,	2,3)	
4	Water	Chapter 8	
5	Carbohydrates	Chapter 4	
Research summary	is due week 5	-	
6	Carbohydrates, continue	ed Chapter 4	
	Lipids	Chapter 5	
7	Lipids, continued	Chapter 5	
During week 6 you	will have examination #2 (ch.4,	8)	
8	Proteins	Chapter 6	
9	Energy and Weight Cor	ntrol Chapter 10	
Diet Analysis is due	e week 9	-	
10	Vitamins	Chapter 7	
During week 8/9 yo	ou will have examination #3 (ch.	5,6)	
11	Minerals	Chapter 8	
12	Review	Chapter 8	