# 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

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#### **Course Information**

This course is not required for Biology majors nor can Biology majors use this course as credit toward the biology major. BIO70 satisfies a CUNY Pathways Flexible Core: Scientific World (Group E)

#### **Course Description**

Increased food processing, chemical additions to food, and the great variety of available foods make it important to understand the basic ideas of modern nutrition. Such concepts as biochemical individuality as related to nutrition for optimum health are integrated with surveys of carbohydrate, protein and fat metabolism. Also studied are the role of vitamins and minerals in metabolic processes, food selection, special diets during illness, and safety of the food supply. Students analyze their own diet.

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

The course will be taught synchronously which at designated time and 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 google classroom app on your phone and navigate the course.

The BIO70 course officially starts on Monday, September 21, and ends on January 15

**<u>Prerequisites/co-requisites:</u>** Enrollment in the College Now Program

### Meeting Day

Tuesday-Wednesday 3:20 pm - 4:30 pm Google classroom A total of 2 hours and 20 minutes every week synchronously and asynchronously.

### **Instructor Contact information**

Email: JAndraw@schools.nyc.gov *Office Hours:* Wednesday 4:30 pm - 5:30 pm online This term will be virtual via google meet by appointment or via emails and phone calls. I will reply to your email within 24 business hours.

### Textbook:

An Introduction to Nutrition https://www.oercommons.org/courses/an-introduction-to-nutrition-v1-0/view

## **Expectation of student participation**

• Every time you enter the course on google classroom spend a few moments to read the announcement to be updated on assignments or notifications. It is recommended that you log into google classroom

at least two 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 google classroom account and a code that will be sent to you shortly to access google classroom and Pupilpath email account to check your emails.

## 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.

## **Student Learning Objectives**

- 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

## <u>Civility Statement</u>

- 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 penalty- ranging from grade reduction to course failure - is at the discretion of individual faculty members.

### Accessibility:

Access-Ability Services (AAS) serves as a liaison and resource to the KCC community regarding disability issues, promotes equal access to all KCC programs and activities, and makes every reasonable effort to provide appropriate accommodations and assistance to students with disabilities. Please contact this office if you require such accommodations and assistance. Your instructor will be glad to make the accommodations you need, but you must have documentation from the Access-Ability office for any accommodations.

### Attendance Policies

- A grade of WU is to be assigned to students who attended (participating in google meet, the discussion board and submitting assignments) a minimum of one class, completely stopped attending at any time before final exam week and did not officially withdraw.
- Absence from exams earns a zero on the exam. Assignments submitted late receive partial credit.

Assignment	
Welcome discussion forum	5
Discussion board	10
PBL/Chapter activities	25
Group challenge/dilemma	10
Group Activity/presentation	10
Children book/Brochure	10
Study sheets/Chapter Summary	10
Final exam	20
Total	100
<u>Full description</u> of each assignment will be posted on Google classroom No credit for late discussion forum or discussion board Assignment	

## How Your Grade is Computed

## Final Examination

The final examination is cumulative; you must review the entire term's work.

# How the course is organized

- Stream:
  - > announcement will be posted at the beginning of each week
  - > syllabus, schedule, instruction on how to navigate the course
- Classwork:
  - Detailed description of the assignments for each week, discussion board, PBL activities, respond to posted question and reply to a classmate
- My grade: all assignments grades are posted here; upcoming, submitted, and graded

# **BIO70** The Biology of Nutrition Course Schedule

Fall 2020: September 21/20 -January 15/20

Jacqueline Andrawis

Week	Content Materials Read/Watch
Dates	Assignments
	All deadlines are 11:59 pm Content
<b>Week 1</b> 9/21-9/25	<ul> <li>Bio70 Syllabus</li> <li>Course schedule</li> <li>Navigate the course content</li> </ul> Assignment
	<ul> <li>Introduce yourself to your classmates and respond to the posted question in the welcome discussion forum</li> </ul>
	Content
	<ul> <li>Read chapter 1</li> </ul>
<b>Week 2</b> 9/28-10/2	Assignment
	<ul> <li>Chapter 1 activity</li> <li>Respond to the posted question on the discussion board</li> </ul>
	Content
<b>Week 3</b> 10/5-10/9	<ul> <li>Read chapter 2</li> <li>Assignment</li> </ul>
	<ul> <li>Chapter 2 activity</li> </ul>
	Content
<b>Week 4</b> 10/12-10/16	<ul> <li>Read the following articles</li> </ul>
	<ul> <li>Risk factors affecting obesity development in high school students https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6776456/</li> </ul>
	$\circ$ Obesity Among High School Students in the United States: Risk
	Factors and Their Population Attributable Fraction https://www.cdc.gov/pcd/issues/2018/18_0122.htm
	$\circ$ Overweight and Obesity in Children and Adolescents in Schools -
	<ul> <li>The Role of the School Nurse https://www.nasn.org/advocacy/professional-practice-documents/position- statements/ps-overweight</li> <li>Watch Choose My Plate Dietary Guidelines https://www.youtube.com/watch?v=- J1hmmy1OB4</li> <li>Other resources https://www.choosemyplate.gov/</li> </ul>

	Assignment
	<ul> <li>Chapter 1-2 study document</li> <li>Group activity         Contact and schedule a meeting with your group         Read the materials posted and prepare for the meeting         The group activity is due next week     </li> </ul>
	Assignment
Week 5 10/19-10/23	<ul> <li>Participate in the Obesity Dilemma PBL group activity discussion Your solution to the problem must include the answers for all the six posted questions.</li> <li>The group activity is due this week</li> </ul>
	Content
<b>Week 6</b> 10/26-10/30	<ul> <li>Read chapter 3</li> <li>Assignment</li> </ul>
	Chapter 3 activity     Chapter 3 activity
	Chapter 3 study document Content
Week 7 11/2-11/6	<ul> <li>Read Chapter 4</li> <li>Assignment</li> </ul>
	<ul> <li>Chapter 4 activity</li> <li>Chapter 4 study document</li> </ul>
	Content
<b>Week 8</b> 11/9-11/13	<ul> <li>Read chapter 5</li> <li>Assignment</li> </ul>
	<ul> <li>Chapter 5 activity</li> <li>Group activity</li> <li>Contact and schedule a meeting with your group</li> <li>Read the materials posted and prepare for the meeting</li> <li>The group activity is due week 10</li> </ul>
<b>Week 9</b> 11/16-11/20	<ul> <li>Group activity</li> <li>Meet with your group and submit the children book/brochure</li> <li>The group activity is due next week</li> </ul>
	Content
<b>Week 10</b> 11/23-11/25	<ul> <li>Read chapter 6</li> <li>Assignment</li> </ul>
	<ul> <li>Chapter 6 activity</li> <li>Chapter 5-6 study document</li> </ul>
	Chapter 5-6 study document     Content
<b>Week 11</b> 11/30-12/4	<ul> <li>Read Chapter 7</li> <li>Assignment</li> </ul>
	<ul> <li>Chapter 7 activity</li> <li>Respond to the posted question on the discussion board</li> </ul>
<b>Week 12</b> 12/7-12/11	Content
	<ul> <li>Read the chapter 8</li> <li>Assignment</li> </ul>
	<ul> <li>Chapter 8 activity 1</li> <li>Chapter 8 activity 2</li> </ul>

	Assignment	
<b>Week 13</b> 12/14-12/18	<ul> <li>Group activity Contact and schedule a meeting with your group Read the materials posted and prepare for the meeting The group activity is due next week</li> </ul>	
	Assignment	
Week 14 12/21-12/23	<ul> <li>Group activity The group activity is due this week</li> <li>Participate in the vitamins and minerals Projects</li> </ul>	
<b>Week 15</b> 1/4-1/8	Content	
	<ul> <li>Read Chapter 10</li> <li>Assignment</li> </ul>	
	<ul> <li>Chapter 10 activity document</li> <li>The group activity is due This week</li> </ul>	
Final Week 1/11-1/15	Final Exam	
<u>Full description</u> of each assignment will be posted on blackboard No credit for late Assignment		