

COURSE SYLLABUS

Fall 2021

LIFE SPAN NUTRITION NUTR 11:709:345

Academic Calendar Directory: https://academicaffairs.rutgers.edu/academic-calendar-directory

You are advised to retain a copy of this syllabus in your personal files for use when applying for future degrees, certifications, or transfer of credit.

INSTRUCTOR INFORMATION

Instructor:	Daniel J. Hoffman, PhD
Email:	dhoffman@sebs.rutgers.edu
Phone:	
Office Location:	Davison Hall 228
Office Hours:	Virtual Office Hours Upon Request

Communication:

Throughout the semester, I will communicate with you via either **Canvas Announcements** or your **Rutgers email account**. Please review the following link for <u>Accessing Rutgers Email</u>:

https://canvas.rutgers.edu/documentation/general/accessing-rutgers-email/

Please check your email every morning for any announcements that I have sent out regarding this course. You are responsible for the information I send to you via Canvas announcements.

GENERAL COURSE DESCRIPTION

Course Description:

Exploration of how nutritional needs change and vary from before and after conception, through gestation and early childhood, adolescence, adulthood, and older age

Prerequisite: 11:709:255

Course Modality:

This course is delivered live with an online component. To access the companion Canvas course site, please visit <u>Rutgers Canvas</u> at <u>https://canvas.rutgers.edu/</u> and log in using your NetID. For more information about course access and support contact <u>Canvas Help</u> at <u>https://canvas.rutgers.edu/canvas-help/</u>, via email at <u>help@canvas.rutgers.edu</u>, or call 877-361-1134.

Purpose of the Course:

This course will cover fundamental aspects of how and why nutritional requirements change from gestation through childhood into adulthood and pregnancy, focusing on the "first 1,000 days" as a key period that establishes health throughout the lifespan. In addition, the course will draw on current and past research and how it explains what we know about nutrition during different phases of life with several links to global and health and nutrition. As well, the course will introduce students to nutrition research and writing through the reading of research studies and a major writing assignment.

MATERIALS

Required Texts:

The online textbook (Brown Nutrition Through the Life Cycle 7e) for this course can be found on the Canvas website.

Additional Course Resources:

Students will purchase their access from the bookstore or they can purchase directly through Cengage. If anyone runs into any issues, Tech Support should be their first point of contact: 24/7 Technical Support: 1.800.354.9706 | http://support.cengage.com

A variety of printed and digital content may be provided during the course. Digital content will be found within the **Canvas course site**. There may be additional reading assignments as student interests dictate.

Technology Requirements:

This course may require that you access online resources in the University's Canvas site. Please review the following link for <u>Canvas Student Resources</u> for assistance on getting started in Canvas:

https://canvas.rutgers.edu/students/

Additional Technical Requirements:

Review Rutgers' Tech Guides at: https://it.rutgers.edu/technology-guide/

Publisher Content and Technology Tools Accessibility Statements:

[Select the accessibility links for the tools you will be using from the <u>Product Accessibility Statement</u> list at <u>https://tlt.rutgers.edu/accessibility-resources-instructors#TLT_vpat</u> and include them below.]

STUDENT LEARNING OBJECTIVES

By fully participating in this course, you should be able to:

1. Describe major nutritional requirements during each phase of life beginning with gestation, infancy and early childhood, adolescence, adulthood, and elderly years.

TEACHING PROCEDURES

This course is fairly traditional with some online components. You are expected to read each chapter BEFORE class and you are encouraged to complete the "<u>Concept Checks</u>", <u>"Review Questions</u>", and a "Post-Chapter Test". As well, key ideas will be further explored in online group "Discussions". Finally, you will take a fairly quick "Quiz" for the material covered to see how well you have understood the material thus far. After the second lecture of each week, you will have two days to study and then take a module "<u>Assessment</u>" to determine how well you mastered the material in the chapter. All of the items that are highlighted in BOLD will count towards your overall grade while those items <u>underlined</u> will count towards your participation grade.

Teaching Philosophy:

The top priority for teaching this course is that you learn beyond the basics of why and how nutritional requirements change during life. To that end, it is my goal is to implement effective teaching strategies to help you learn to the best of your ability. You will be the focus of my teaching, and personal connection to you and personalization of your learning experiences will be my top priority.

Instructor Responsibilities:

- Provide a clear and structured course with objective expectations.
- Present the material covered in a logical and educational manner.
- Encourage free thinking and independent inquiry (ask questions!)
- Assess my teaching at regular intervals.
- Assess your performance using objective and fair means (quizzes, discussions, and tests).
- Be available to address concerns within 24-48 hours of receiving an email.

COURSE COMPLETION REQUIREMENTS

Your success in this course depends on the following:

- **Quizzes** that are taken at the end of each class with a chance to review material that may be confusing.
- Weekly Assessments that open on Friday and close on Monday to determine how well you learned the material covered in the module.
- A final paper (details to follow) will be due by 12 noon on 14 Dec 2021.
- You are required to attend attendance will be taken through responses to pop quiz questions.

GRADING

Final Course Grade:

Grades in this course are weighted according to the table below.

Activity or Assignment	Due Date	Points or Grade %
Canvas quizzes	Wednesday at 6pm	10%
Canvas assessments	Mondays at 12noon	20%
Exams	See syllabus	60%
Commentary	14 Dec 2021	10%
Total		100%
Participation	Weekly	Extra Credit

Grading Scale:

This is the <u>approximate</u> grading system that will be used in this class. I may adjust some of the scales depending on the overall performance of the class. Please remember one thing, you earn a grade based on the total number of points you earn through classwork (discussions, quizzes, etc). You are not "entitled" to a grade just because you feel that you worked hard.

NOTE: Final grades are not "rounded up", meaning that a student who scores 89.9% of all points will not be rounded up to 90%.

Please monitor your grades every single day or week so that you can seek advice to improve your grade during the course, not the day before the final or after the course closes.

Grade	Range
А	100 - 95
A-	90 - 94
B+	87 - 89
В	84 -86
B-	80 -83
C+	77 - 79
С	74 - 76
C-	70 - 73
D+	67 -69
D	65 - 66
D-	61 - 64
F	60 and Below

ACADEMIC POLICIES AND PROCEDURES

Attendance Policy:

You are responsible for material covered in any class that you do not attend. If you miss a class, you must contact a classmate or me for the missed information. If you have a situation that might cause you to miss an entire week of class, discuss it with me *as soon as possible*.

Submission Policy:

All work for each module has posted dates and times when the respective activities close. Please review these so that you submit all of your work before it closes. No exceptions will be made.

Late Work:

Work cannot be submitted after an activity or module closes. If you have technical issues, contact Rutgers IT or Canvas Help Desk well in advance of a closing time and date.

Coursework Difficulties:

Please discuss any issues that you are having in completing the coursework on time with me. I am available to talk this over with you by appointment.

Incomplete Policy:

If you are unable to complete the coursework during the semester due to some catastrophic issue, you must contact me immediately to discuss your alternatives.

Academic Honesty and Plagiarism:

Our purpose in the classroom is to seek the truth; this work requires trust and honesty between teacher and student. If we are not honest about what we know and do not know, our learning will always be impaired. Because our teaching and learning depends on this honest communication, we expect all students to understand what plagiarism is and why it is unacceptable.

Any student considering plagiarism should recognize the consequences and consider alternatives. Students uncertain about what constitutes plagiarism may request help from faculty or from appropriate University services. For information on using sources in writing, see the Identifying and Avoiding Academic Dishonesty section of the <u>Rutgers Academic Integrity</u> web site:

http://academicintegrity.rutgers.edu/resources-for-students/

STUDENT CODE OF CONDUCT

Students are required to adhere to the <u>University Student Code of Conduct</u> delineated in the Rutgers Student Affairs website <u>Student Conduct</u> page:

http://studentconduct.rutgers.edu/student-conduct-processes/university-code-of-studentconduct/#1495568095620-2f5ce77d-17dd

ACCOMMODATIONS

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact

the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <u>https://ods.rutgers.edu/students/documentation-guidelines</u>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the <u>Registration form</u> (https://webapps.rutgers.edu/student-ods/forms/registration).

STUDENT SUPPORT SERVICES

Academic Services:

- For academic support visit Rutgers Academics Student Support at https://www.rutgers.edu/academics/student-support
- Any student can obtain tutoring and other help at the <u>Learning Centers</u> on each campus. Check the website at <u>https://rlc.rutgers.edu/</u>
- For coaching help with writing skills and assignments visit the <u>Writing Coaching</u> webpage at <u>https://rlc.rutgers.edu/student-services/writing-coaching</u>
- Many library resources are available online. Assistance is available through phone, email, and chat. For information, check the <u>Rutgers Libraries</u> website at <u>https://www.libraries.rutgers.edu/</u>

Rutgers Student Health Services:

<u>Rutgers Student Health Services</u> is dedicated to health for the whole student body, mind and spirit. It accomplishes this through a staff of qualified clinicians and support staff. Services are available at several locations throughout the New Brunswick-Piscataway area. For more information visit: <u>http://health.rutgers.edu/</u>

Veteran Services:

Rutgers is proud to support veterans. If you are a veteran of the armed forces, please visit the <u>Office of</u> <u>Veteran and Military Programs and Services</u> website for more information: <u>https://veterans.rutgers.edu/</u>

TOPICS SCHEDULE

All classes will meet in CDL 103 on Tuesdays and Thursdays at 5pm.

There may be a pop quiz at the start of class, so it is in your best interest to be punctual.

Quizzes for each class will open at 6pm on Tuesday and close at 6pm on Wednesday, so you can take it at the end of class or anytime during the next 24 hours.

CLASS [·]	1
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2 SEP 21

Category	Description
Core Topic(s)	Course Overview and Nutritional assessment
Learning Objectives	 At the end of this week, you will be able to: Explain the major ways in which nutritional status is assessed using anthropometry Describe methods used to assess body composition Describe methods used to assess energy expenditure

CLASSES 2 and 3

7 & 9 SEP 21

Category	Description
Core Topic(s)	Pre-pregnancy nutrition and Scientific Research/Writing
Learning Objectives	 At the end of this week, you will be able to: Cite three examples of the Healthy People 2020 nutrition-related objectives for the preconception period. Identify six major hormones involved in the regulation of male and female fertility processes and identify their source and effects on the regulation of fertility processes. Describe the potential effects of nutrition-related factors such as body fat content, iron status, and alcohol intake on fertility in females and males. Cite four examples of relationships between nutrient intake and nutritional status during the periconceptional period and the outcome of pregnancy. Identify three nutrition-related consequences that may be related to the use of combination hormonal contraceptives, and a consequence that is related to the use of estrogen or progestin contraceptives only. Cite three important nutrition-related components of pre-conceptional health care. Describe the four steps of the Nutrition Care Process. Describe the four steps of the Nutrition Care Process. Understand the fundamentals of writing research papers.

Category	Description
	 Understand how to conduct literature searches on PubMed Explain the fundamental aspects of writing a "commentary"
Readings/Media	Chapter 2

CLASSES 4 and 5

14 & 16 SEP 21

Category	Description
Core Topic(s)	Nutritional aspects of pregnancy
Learning Objectives	 At the end of this week, you will be able to: Identify three problem areas related to pregnancy outcomes in the United States. Describe five physiological changes that normally occur during pregnancy that would be considered abnormal if they did not occur during pregnancy. Correlate critical periods of growth and development and the potential consequences of inadequate energy and nutrient availability during these periods on future health status. Identify recommended weight gain ranges for women who enter pregnancy underweight, normal weight, overweight, and obese. Correlate three examples of relationships between nutritional status during pregnancy and long-term health outcomes in offspring. Provide five examples of how the need for energy and specific nutrients change due to pregnancy. Identify three factors that influence dietary intake during pregnancy that are not related to food availability. Identify the basic components of a nutritional assessment of pregnant women. Assess three common health problems during pregnancy and the evidence on the effectiveness of dietary interventions for their treatment or amelioration. Describe the nutrition service components of a model nutrition program during pregnancy.
Readings/Media	Chapter 4

CLASSES 6 and 7

21 & 23 SEP 21

Category	Description
Core Topic(s)	Lactation
Learning Objectives	At the end of this week, you will be able to:

Category	Description
	 Describe the development, the structure, and the functional components of the mammary gland. Describe the key hormonal influences on development and function. Identify similarities and differences in nutrient levels between colostrum and mature human milk, and between mature human milk, whole cow's milk, and human milk substitutes (infant formula). Summarize the benefits of breastfeeding for mothers and their babies in a manner that could be included in breastfeeding education for expecting mothers, their partners, and family members. Generate an education plan for new mothers that includes the answers to common questions about milk supply, including what is typical milk production, what is the relationship between infant demand and maternal supply, and the influence of the size of the breast, feeding frequency, pumping, and breast surgeries on milk production. Describe maternal steps to prepare the breast, and the basic position of the infant at the breast. Identify at least two breastfeeding promotion programs that have demonstrated effectiveness at increasing breastfeeding initiation and duration. Summarize factors known to be associated with higher and lower rates of breastfeeding, and the gap between current rates and the Breastfeeding Goals for the United States.
Readings/Media	Chapter 6 https://youtu.be/xWPbykBKEMA

CLASSES 8 and 9

28 & 30 SEP 21

Commentary and Exam 1

Category	Description
Core Topic(s)	Scientific Writing
Learning Objectives	 At the end of this week, you will be able to: Describe the elements of a "commentary" Prepare an outline for your commentary Explain the elements of forming the first two paragraphs Describe how to identify dditional research needed (references and PubMed)
Readings/Media	Canvas readings for "Commentary"

Category	Description
Assignments Due	 Outline DUE Oct 5 (5 points) Paragraphs 1 and 2 DUE Oct 12 (5 points) Revised paragraphs DUE Oct 26

CLASSES 10 and 11

5 & 7 OCT

Category	Description			
Core Topic(s)	Infant nutrition			
Learning Objectives	 At the end of this week, you will be able to: Examine factors that are associated with increased risk for health and developmental problems in infants. Describe guidelines and tools that can be used to identify appropriate energy and nutrient needs of infants. Describe how to assess adequate growth in infants. Discuss how feeding and food choices that parents make for their infants can affect later health status. Identify infant developmental milestones related to feeding. Describe how providers and families access nutrition guidance for infants. Identify how nutrition problems and concerns impact overall infant health and development. Cite examples of nutritional interventions that can reduce risk for nutrition and health problems in infancy. 			
Readings/Media	Chapter 8			

CLASSES 12 and 13

12 & 14 OCT

Category	Description			
Core Topic(s)	Toddler nutrition			
Learning Objectives	 At the end of this week, you will be able to: List two Healthy People 2020 objectives related to toddlers and preschool age children. Identify the screening tool used for assessing underweight, overweight, or obesity in young children. Describe two strategies that parents/caretakers can employ to encourage toddlers/ preschoolers to accept a variety of foods in their diets. Explain what influences energy needs of young children. 			

Category	Description			
	 Identify one common nutritional problem of young children and describe prevention strategies. Define overweight and obesity in young children. Describe the components of a healthy diet for young children as recommended by health and professional organizations and agencies. Identify one public food or nutrition program that provides services to young children and describe the program's strategies in improving nutrition of young children. 			
Readings/Media	Chapter 10			

CLASSES 14 and 15

19 & 21 OCT

Category	Description
Core Topic(s)	Child nutrition
Learning Objectives	 At the end of this week, you will be able to: Examine factors that are associated with increased risk for health and developmental problems in infants. Describe guidelines and tools that can be used to identify appropriate energy and nutrient needs of infants. Describe how to assess adequate growth in infants. Discuss how feeding and food choices that parents make for their infants can affect later health status. Identify infant developmental milestones related to feeding. Describe how providers and families access nutrition guidance for infants. Identify how nutrition problems and concerns impact overall infant health and development. Cite examples of nutritional interventions that can reduce risk for nutrition and health problems in infancy.
Readings/Media	Chapter 12

CLASSES 16 and 17

26 & 28 OCT

Category	Description	
Core Topic(s)	Adolescent nutrition	

Category	Description				
Learning Objectives	At the end of this week you will be able to:				
	 Explain why sexual maturity and biological maturity (biological age) are better determinants of nutritional needs than chronological age. Explain how the psychosocial developmental stages of adolescence, including levels of abstract reasoning and critical thinking abilities, affect the types of health education messages and intervention components that are effective with teens. Describe at least three eating behaviors commonly seen among adolescents and the potential consequences of these behaviors on nutritional status. Compare which nutrients adolescents consume in lower than recommended amounts and which nutrients they consume in higher than recommended amounts, and how these behaviors may impact overall health status. Identify the key components of nutrition assessment and screening of adolescents and how resulting data can be used during nutrition education and counseling. Describe the roles that peers, families, schools, and communities play in determining the dietary behaviors and nutritional status of adolescents. 				
Readings/Media	Chapter 14				

CLASSES 18 and 19

2 & 4 NOV

Commentary and Exam 2

Category	Description			
Core Topic(s)	Scientific Writing			
Learning Objectives	 At the end of this week you will be able to: Describe the elements of a "commentary" Explain the components that form the heart of the commentary Integrate additional research needed (references and PubMed) Assignment: work on para's 3-5 			
Readings/Media	Canvas readings for "Commentary"			
Assignments Due	 Supporting papers DUE Nov 9 Paragraphs 3-5 DUE Nov 23 (10 points) 			

CLASSES 20 and 21 9 & 11 NOV 21

Category	Description
Core Topic(s)	Adult nutrition
Learning Objectives	At the end of this week you will be able to:
	 Discuss different types of nutrition-related risk factors and how they are monitored in adults.
	 Describe normal physiological changes in adulthood and how they are associated with the development and progression of chronic diseases.
	 Estimate your daily energy needs using three methods and discuss factors that affect energy expenditure of adults.
	 Identify nutrients that are consumed in excessive and inadequate levels and the consequences for adult health.
	 Explain the purpose of dietary guidance and how it translates science into healthful food and beverage choices and pleasurable eating experiences for adults.
	 Describe national recommendations for physical activity and the benefits of regular physical activity.
Readings/Media	Chapter 16

CLASSES 22 and 23

16 & 18 NOV

Category	Description			
Core Topic(s)	Nutrition and older adults			
Learning Objectives	At the end of this week you will be able to:			
	 Distinguish three or more reasons why functional status is a better indicator of health in older adults than chronological age. Discuss the distinctions between life expectancy and life span, and address implications for society of increases in both. List five physiological changes occurring at ages 70+ and describe nutritional implications for each. Describe the relative effectiveness of two nutrition screening and assessment tools. Relate how enjoying a varied diet contributes to mental and physical wellbeing. Compare nutrient recommendations of old and young adults, citing five or more nutrients of concern for older populations. Explain how good food safety practices contribute to the health of older adults, and how increasing functional decline can be accommodated. 			
Readings/Media	Chapter 18			

CLASS 24 OPEN

CLASSES 25 and 26

30 NOV & 2 DEC

Category	Description			
Core Topic(s)	Double burden of malnutrition and global nutrition			
Learning Objectives	At the end of this week you will be able to:			
	 Explain what is meant by the "double burden of disease and malnutrition" Describe social and economic factors that contribute to the "double burden" Explain how diet and food systems interact to promote health Describe major factors that influence nutritional health in the world Explain how low-income countries face similar and different challenges to nutrition than wealthier countries Describe how research in global nutrition can impact nutrition in the US 			
Readings/Media	All readings and activities are found in Module 11			

CLASSES 27 and 28

7 & 9 DEC

Commentary and Exam 3

Category	Description		
Core Topic(s)	Scientific Writing		
Learning Objectives	 At the end of this week you will be able to: Review and revise your commentary with peer input Begin to prepare the final draft of your commentary 		
Readings/Media	Canvas readings for "Commentary"		

ASSESSMENT RUBRICS

Short-answer/Essay Questions

Throughout this course, on weekly assessments and exams, you will be asked to answer an open-ended question. Such questions will be worth 10-20 points and grades will be assigned as follows:

- To score 90% or higher, you must answer the questions fully and with sufficient detail that a person unfamiliar with the topic could understand the answer.
- To score 80% or higher, you must answer the key points in the question.
- To score 70% of higher, you must show an attempt to answer the question, even if you lack detail.
- Any attempt to answer the question with information that is not relevant to the question will receive 60%.
- Even trying to answer the question may earn you up to 50% of the points.
- A blank answer will receive 0 points.

My advice: **Try and answer each question and provide physiological details to support your answer**. Most important, read the question and **answer the question being asked**, additional information that is tangential to the question will not improve your score.

Commentary Requirements:

You are to submit a 1200 word "commentary" on an <u>approved</u> research paper of your choice by **12 noon on 14 December 2021.** You will submit your paper on Canvas and it will be scanned by Turnitin to check for potential plagiarism. Please note that any finding of plagiarism will results in an automatic failure of the paper and the issue will be referred to the department chair and appropriate academic dean.

Criteria for the paper are as follows:

- 1. Present a clear position on the topic (e.g. formula feeding is a necessary tool for some parents or growth rate is a key predictor of adult health or maternal diet is not an important factor for lifelong health).
- 2. Use credible and recent studies or reports to explain and support your position.
- 3. Write with clear and acceptable language to best communicate your position.
- 4. Make sure you provided references for all factual materials or ideas that you quote and are not your own.

An example of a well-written paper will be provided to you early in the semester.

Criteria	Outstanding (20)	Proficient (18)	Basic (16)	Below Expectations (14)
Integration of Knowledge	The paper demonstrates that the author fully understands and has applied concepts learned in the course. Concepts are	 The paper demonstrates that the author, for the most part, understands and has applied concepts learned in the course. Some of the conclusions, 	 The paper demonstrates that the author, to a certain extent, understands and has applied concepts learned in the course. 	 The paper does not demonstrate that the author has fully understood and applied concepts learned in the course.

Grading Rubric for Commentary

Criteria	Outstanding (20)	Proficient (18)	Basic (16)	Below Expectations (14)
	integrated into the writer's own insights. The writer provides concluding remarks that show analysis and synthesis of ideas.	however, are not supported in the body of the paper.		
Topic focus	 The topic is focused narrowly enough for the scope of this assignment. A thesis statement provides direction for the paper, either by statement of a position or hypothesis. 	 The topic is focused but lacks direction. The paper is about a specific topic but the writer has not established a position. 	 The topic is too broad for the scope of this assignment. 	 The topic is not clearly defined.
Depth of discussion	 In-depth discussion & elaboration in all sections of the paper. 	 In-depth discussion & elaboration in most sections of the paper. 	 The writer has omitted pertinent content or content runs-on excessively. Quotations from others outweigh the writer's own ideas excessively. 	 Cursory discussion in all the sections of the paper or brief discussion in only a few sections.
Cohesiveness	 Ties together information from all sources. Author's writing demonstrates an understanding of the relationship among material obtained from all sources. 	 For the most part, ties together information from all sources. Author's writing demonstrates an understanding of the relationship among material obtained from all sources. 	 Sometimes ties together information from all sources. Author's writing does not demonstrate an understanding of the relationship among material obtained from all sources. 	 Does not tie together information. Paper does not flow and appears to be created from disparate issues. Writing does not demonstrate understanding any relationships
Spelling and grammar	 No spelling &/or grammar mistakes. 	 Minimal spelling &/or grammar mistakes. 	 Noticeable spelling & grammar mistakes. 	 Unacceptable number of spelling and/or grammar mistakes.