

COURSE SYLLABUS

Fall 2022

LIFE SPAN NUTRITION NUTR 11:709:345

<u>Academic Calendar Directory</u>: 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 Accessing Rutgers Email:

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 https://canvas.rutgers.edu/ and log in using your NetID. For more information about course access and support contact <u>Canvas Help</u> at https://canvas.rutgers.edu/canvas-help/, via email at help@canvas.rutgers.edu, 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. An important aspect of this course is that it is an "active learning" course in which students will use a variety of methods to both learn and demonstrate their mastery of the material. For example, aside from readings and lectures, students will explore key concepts through case studies, data interpretation, and current news events. These activities will be linked to individual and group assessments (e.g. reports, papers, quizzes, and assessments) that will be used to determine the final grade for the course. 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. Finally, 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' <u>Tech Guides</u> 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 https://tlt.rutgers.edu/accessibility-resources-instructors#TLT vpat and include them below.]

STUDENT LEARNING OBJECTIVES

By the end of 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.
- 2. Explain the methods used to assess nutritional status in children and adults.
- 3. Explain how the physiological state of each phase of life requires specific nutritional intake to support homeostasis, promote health, and prevent diseases.
- 4. Explain how body composition changes over the lifespan and the impact this has on nutritional requirements.
- 5. Describe the major nutritional and health implications of under- and overnutrition during each phase of life.
- 6. Use PubMed to locate relevant research papers for your professional use.
- 7. Read and interpret research studies and explain how the data support conclusions
- 8. Synthesize information from class with data from research papers to write a critical commentary on a recently published study.

TEACHING PROCEDURES

This course has been designed to maximize your learning experience. By engaging with all components of this course, you will learn fundamental knowledge and skills to enhance your personal and professional abilities to understand human nutrition. Briefly, you are expected to watch all videos and read each chapter BEFORE class and you are encouraged to complete the "Concept Checks", "Review Questions", and a "Post-Chapter Test". These activites will bring you into the important area of learning basic concepts about nutrition across the lifespan.

Class sessions will use active learning by presenting key concepts in a short lecture followed by group activities to further explore these concepts and build on them through different projects. As well, key ideas will be further explored in online group "Discussions". Finally, you will take a Quiz for the material covered to see how well you have understood the material thus far. For each Module you will have an assessment to see how well you have learned the concepts and achieved each class objective.

Teaching Philosophy:

I believe that all students can learn the material in this class well and that students have the right to receive an education in a safe environment that fosters their individual learning styles. The top priority for teaching this course is that you learn beyond the basics of why and how nutritional requirements change during life. In short, you are the focus of my teaching, and a personal connection to you and personalization of your learning experiences will be my top priority. To that end, I will implement effective teaching strategies to help you learn to the best of your ability. In this course I have provided a structured format that includes a variety of activities including readings, videos, lectures, case studies, writing assignments, and active learning to allow you to engage as much as possible in the learning process. I also view education as a partnership, one in which I facilitate your learning through lectures and assessments, and you contribute by participating and providing feedback as the semester unfolds. Together we will explore how nutritional requirements change over the lifespan and why these changes occur to not only educate you, but to also help you achieve your academic and career goals.

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
- Assessments
- Exams
- Commentary will be due by 12 noon on 12 Dec 2022.
- Active Learning Activities

GRADING

Final Course Grade:

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

Activity or Assignment	Due Date	Points or Grade %
Active Learning	Weekly	30%
Canvas quizzes	Weekly	10%
Canvas assessments	See schedule	20%
Exams	See schedule	20%
Commentary	12 Dec 2022 at 12 noon	20%
Total		100%
Participation	Weekly	Bonus points

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
Α	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 should 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 your work before it closes. Life happens, so please let me know of any issues that are creating roadblocks to getting work done on time.

Late Work:

If you have technical issues, contact Rutgers IT or Canvas Help Desk well in advance of a closing time and date. Late work may be submitted for 50% of the points provided you communicate with me before an assignment is due.

Coursework Difficulties:

Please send me an email to discuss any issues that you are having in completing the coursework on time. 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-student-conduct/#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: https://ods.rutgers.edu/students/documentation-guidelines. 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 Registration form (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 https://rlc.rutgers.edu/
- For coaching help with writing skills and assignments visit the <u>Writing Coaching</u> webpage at https://rlc.rutgers.edu/student-services/writing-coaching
- Many library resources are available online. Assistance is available through phone, email, and chat. For information, check the <u>Rutgers Libraries</u> website at https://www.libraries.rutgers.edu/

Rutgers Student Health Services:

Rutgers Student Health Services 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: http://health.rutgers.edu/

Veteran Services:

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

TOPICS SCHEDULE

All classes will meet in IFNH 101 on Mon and Thur at 10:20am.

CLASSES 1 - 3

8, 12 & 15 SEP

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. • Describe methods used to assess body composition • Describe methods used to assess energy expenditure

CLASS 4 19 SEP

Category	Description
Core Topic(s)	Scientific Research/Writing
Learning Objectives	 Describe how nutrition research is conducted as well as the various types of nutrition research studies. Understand the fundamentals of writing research papers. Understand how to conduct literature searches on PubMed Explain the fundamental aspects of writing a "commentary"
Readings/Media	Canvas Key Paper due 26 Sep (Canvas) Outline due 3 Oct (Class)

CLASS 5 22 SEP

Category	Description
Core Topic(s)	Pre-Pregnancy (periconception)
Learning Objectives	Describe how various factors influence fertility. Explain the process of DNA methylation Understand how periconception influences adult health
Readings/Media	Canvas

CLASSES 6, 7, & 8

26 & 29 SEP and 3 OCT

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 9, 10, & 11

6, 10, & 13 OCT

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

Category	Description
	 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. Describe infant behaviors that indicate readiness to feed, and vitamin supplement recommendations for breastfeeding infants. 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

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 additional research needed (references and PubMed)
Readings/Media	Canvas readings for "Commentary"
Assignments Due	 Paragraphs 1 and 2 DUE 20 Oct (5 points) First draft DUE 10 Nov

CLASS 12 17 OCT

EXAM 1

CLASSES 13-16

24, 27, & 31 OCT

Category	Description
Core Topic(s)	Infant nutrition
Learning Objectives	 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

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. Identify one common nutritional problem of young children and describe prevention strategies. Define overweight and obesity in young children.

Category	Description	
	 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 17 & 18

3 & 7 NOV

Category	Description
Core Topic(s)	Child and adolescent 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

Category	Description
Core Topic(s)	Adolescent nutrition
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

Category	Description
	 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 19 10 NOV

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 10 Paragraphs 3-5 DUE Nov 28 (10 points) 			

CLASS 20 14 Nov

Guest lecture

CLASS 21 17 Nov

Review Assessment and Problem Based Learning

CLASS 22 21 OCT

EXAM 2

CLASSES 23 & 24

28 NOV & 1 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 Canvas			

CLASSES 25 & 26

5 & 8 DEC

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

Category	Description			
Core Topic(s)	Nutrition and older adults			
Learning Objectives	At the end of this week you will be able to:			
	 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 well being. 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			

CLASSES 28 CASE STUDIES

12 DEC

ACEND CORE KNOWLEDGE

709:345 Life Span Nutrition

2022 Core Knowledge for the RDN (KRDN) – Standards for the Didactic Programs in Dietetics: Rutgers University Department of Nutritional Sciences undergraduate Didactic Program in Dietetics is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND). The following ACEND Core Knowledge aptitudes are included within the curriculum of this course:

KRDN 1.1: Demonstrate how to locate, interpret, evaluate, and use professional literature to make ethical, evidence-based practice decisions (i.e., writing of a 1200-word commentary on recent research publication).

KRDN 1.2: Select and use appropriate current information technologies to locate and apply evidence-based guidelines and protocols (i.e., Canvas discussions, case-studies and writing of a 1200-word commentary on recent research publication).

KRDN 1.3: Apply critical thinking skills (i.e., Canvas discussions, case-studies and writing of a 1200-word commentary on recent research publication)

KRDN 2.1: Demonstrate effective and professional oral and written communication and documentation (i.e., Canvas discussions, case-studies and writing of a 1200-word commentary on recent research publication).

KRDN 2.6: Demonstrate cultural humility, awareness of personal biases and an understanding of cultural differences as they contribute to diversity, equity and inclusion (i.e., Canvas discussions and case studies).

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.

Grading Rubric for Commentary

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 integrated into the writer's own insights. The writer provides concluding remarks that show analysis and synthesis of ideas.	The paper demonstrates that the author, for the most part, understands and has applied concepts learned in the course. Some of the conclusions, however, are not supported in the body of the paper.	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.
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. The topic is not clearly defined.

Criteria	Outstanding (20)	Proficient (18)	Basic (16)	Below Expectations (14)
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.