The relationship between nutrition and behavior is assuredly bi-directional. There is compelling evidence that nutritional status or even the intake of specific nutrients can influence behavior. Conversely, behavior can affect nutritional status through our acceptance of some foods but our rejection of others. Moreover, numerous contextual factors influence when, what, and how much we eat.

**Learning objectives**

The primary goal of this course is to familiarize you with the diverse literature on nutrition and behavior and the methodologies used in such research. Upon completion of this course, students will be able to list and explain:

a. the major questions being explored in nutrition and behavior research;
b. areas of controversy in nutrition and behavior research; and
c. relevant theories that explain nutrition and behavior relationships.

In addition, students will have:

d. assessed their own eating style through standardized instruments; and
e. critically analyzed an empirical study and prepared an evidence-based argument for the support or dismissal of a claim that links nutrition and behavior.

**ACEND 2017 Standards met for Didactic Program in Dietetics**

**KRDN 1.2 Scientific and Evidence Base of Practice:** Integration of scientific information and translation of research into practice. Upon completion of the program, graduates are able to: (a) Use current information technologies to locate and apply evidence-based guidelines and protocols; and (b) Apply critical thinking skills.

**KRDN 2.1 Professional Practice Expectations:** Beliefs, values, attitudes and behaviors for the professional dietitian nutritionist level of practice. Upon completion of the program, graduates are able to: Demonstrate effective and professional oral and written communication and documentation.

Your participation in this class will be expected and count toward your grade. To encourage your active engagement, there are a number of assignments that involve your thinking about the course material outside the classroom. Approximately half of each weekly meeting will consist of my lecturing on the topic of the week, although your questions and comments are certainly encouraged. Following a brief break, the second half of each class may be reserved for exercises, occasional experiments, and discussion of the class assignments.

Over the last five weeks of the semester class time will be devoted to your own presentations in a “mock” debate. Your participation is therefore very critical to the success of the course, and includes your regular attendance, prompt arrival, and
contribution to our weekly meetings, but especially your sharing responsibility for taking one side of the nutrition–behavior issue that will be debated during a specific week near the end of the semester.

**Course Readings**
Worobey, J., Tepper, B.J., & Kanarek, R.B. (2015). *Nutrition and behavior: A multidisciplinary approach* (2nd ed.). Oxfordshire, UK: CABI Publishing. (Available at the Barnes and Noble Bookstore, at the intersection of College Avenue and Somerset Street, College Avenue Campus)
Additional readings as provided in class.

### Course requirements
1. Diet and lifestyle exercise  
2. Food and mood exercise  
3. Motivations to eat exercise  
4. Mid-term examination  
5. Debate assignment  
6. Refereed empirical article  
7. Final examination  
8. Attendance  

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<thead>
<tr>
<th>Requirement</th>
<th>Points</th>
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<tbody>
<tr>
<td>Diet and lifestyle</td>
<td>15</td>
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<tr>
<td>Food and mood</td>
<td>15</td>
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<tr>
<td>Motivations to eat</td>
<td>15</td>
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<tr>
<td>Mid-term examination</td>
<td>50</td>
</tr>
<tr>
<td>Debate assignment</td>
<td>40</td>
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<tr>
<td>Refereed empirical</td>
<td>5</td>
</tr>
<tr>
<td>Final examination</td>
<td>50</td>
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<tr>
<td>Attendance</td>
<td>10</td>
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<td>200</td>
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Details regarding the preceding will be described this morning and in later classes. Class participation will be considered at semester’s end for students whose performance may border on a higher grade.

### Grading scale

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
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<tbody>
<tr>
<td>90 – 100</td>
<td>A</td>
</tr>
<tr>
<td>87 – 89</td>
<td>B+</td>
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<tr>
<td>80 – 86</td>
<td>B</td>
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<tr>
<td>77 – 79</td>
<td>C+</td>
</tr>
<tr>
<td>70 – 76</td>
<td>C</td>
</tr>
<tr>
<td>60 – 69</td>
<td>D</td>
</tr>
<tr>
<td>≤ 59</td>
<td>F</td>
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### Important
It is to your advantage to attend class regularly, arrive promptly, and to take whatever notes you deem necessary. Please be forewarned that I do not post my *PowerPoint* slides on SAKAI. Rather, you should make a friend of a conscientious classmate (or two), so that if you miss a class you will have someone from whom you can borrow notes.

### Note to Students re: Academic Integrity
Each and every year, numerous Rutgers students are suspended, expelled or receive failing grades due to violations of academic integrity. Many of the students who are caught cheating were unaware of the consequences or even unaware that their actions constituted cheating at all. For your own protection please read the university’s Academic Integrity Policy. [http://academicintegrity.rutgers.edu/integrity.shtml](http://academicintegrity.rutgers.edu/integrity.shtml)
<table>
<thead>
<tr>
<th>Date</th>
<th>Tentative Topics/Reading Assignments/Exercises</th>
</tr>
</thead>
</table>
| Jan 22  | Introduction, overview, concepts, and models in nutrition and behavior  
          *Reading assignment* – Chapters 1 and 2 |
| Jan 29  | Research methods and analytic strategies  
          *Reading assignment* – Chapter 3  
          [*Exercise 1* - Diet and lifestyle distributed] |
| Feb 5   | Effects of nutrition on behavior: Lipids and cholesterol  
          *Reading assignment* – Chapter 4  
          [*Exercise 1 due* - Diet and lifestyle discussion] |
| Feb 12  | Effects of nutrition on behavior: Neurotransmitters  
          *Reading assignment* – Chapter 5  
          [*Exercise 2* - Motivations to eat distributed] |
| Feb 19  | Bio-behavioral and psychosocial influence on nutrition  
          *Reading assignment* – Chapter 10  
          [*Exercise 2 due* – Motivations to eat discussion] |
| Feb 26  | Effects of undernutrition  
          *Reading assignment* – Chapter 6  
          [*Exercise 3* - Breakfast and mood distributed] |
| Mar 5   | Vitamins and behavior  
          *Reading assignment* – Chapter 7  
          [*Exercise 3 due* – Breakfast and mood discussion]  
          [*review for exam*] |
| Mar 12  | *Mid-term examination*  
          [*Debate instructions and team assignments*] |
| Mar 19  | *No class – Spring Break* |
| Mar 26  | Minerals and behavior  
          *Reading assignment* – Chapter 8 |
| Apr 2   | Dietary supplements and mental functioning  
          *Reading assignment* – Chapter 9  
          **Debate 1**: Does ginkgo biloba improve memory?  
          **Debate 2**: Is St. John’s wort an effective antidepressant?
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<tr>
<th>Date</th>
<th>Tentative Topics/Reading Assignments/Exercises</th>
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| Apr 9  | Sugar, food additives, and behavior  
 *Reading assignment* – Chapter 11  
 **Debate 3:** Do food dyes cause hyperactivity?  
 **Debate 4:** Are artificial sweeteners effective in weight loss? |
| Apr 16 | Factors promoting eating disorders  
 *Reading assignment* – Chapter 14  
 **Debate 5:** Do media influences promote eating disorders?  
 **Debate 6:** Does maternal dieting cause eating disorders in daughters? |
| Apr 23 | Behavioral aspects of overweight and obesity  
 *Reading assignment* – Chapter 15  
 **Debate 7:** Do restrictive feeding practices promote child overeating?  
 **Debate 8:** Does food insufficiency contribute to weight gain? |
| Apr 30 | Stimulants and depressants: Caffeine and alcohol  
 *Reading assignment* – Chapters 12 and 13 |
| May 7  | *No class – Reading day*                                                                                                                                                                                                                     |
| May 14 | *Final examination – 9-11 AM*                                                                                                                                                    |