

Submit original with signatures + 1 copy + electronic copy to Faculty Senate (Box 7500).  
 See <http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures/> for a complete description of the rules governing curriculum & course changes.

**TRIAL COURSE OR NEW COURSE PROPOSAL**

**SUBMITTED BY:**

|                      |  |                        |                 |
|----------------------|--|------------------------|-----------------|
| <b>Department</b>    | Biology  | <b>College/School</b>  | CNSM            |
| <b>Prepared by</b>   | Andrea Bersamin  | <b>Phone</b>           | 907-474-6129    |
| <b>Email Contact</b> | <a href="mailto:abersamin@alaska.edu">abersamin@alaska.edu</a> | <b>Faculty Contact</b> | Andrea Bersamin |

1. **ACTION DESIRED**  
 (CHECK ONE):      Trial Course       New Course

2. **COURSE IDENTIFICATION:**

|      |      |          |            |                |   |
|------|------|----------|------------|----------------|---|
| Dept | BIOL | Course # | LXX<br>TBD | No. of Credits | 4 |
|------|------|----------|------------|----------------|---|

Justify upper/lower division status & number of credits:

This is a foundation course and is therefore offered as a lower division course. 3 hours of instruction will be provided each week in addition to 3 hours of lab.

3. **PROPOSED COURSE TITLE:** Introduction to Human Nutrition

4. **To be CROSS LISTED?**            If yes, Dept:       Course #   
 YES/NO

(Requires approval of both departments and deans involved. Add lines at end of form for additional required signatures.)

5. **To be STACKED?**            If yes, Dept.       Course #   
 YES/NO

Stacked course applications are reviewed by the (Undergraduate) Curricular Review Committee and by the Graduate Academic and Advising Committee. Creating two different syllabi—undergraduate and graduate versions—will help emphasize the different qualities of what are supposed to be two different courses. The committees will determine: 1) whether the two versions are sufficiently different (i.e. is there undergraduate and graduate level content being offered); 2) are undergraduates being overtaxed?; 3) are graduate students being undertaxed? In this context, the committees are looking out for the interests of the students taking the course. Typically, if either committee has qualms, they both do. More info online - see URL at top of this page.

6. **FREQUENCY OF OFFERING:** Every Spring  
 Fall, Spring, Summer (Every, or Even-numbered Years, or Odd-numbered Years) - or As Demand Warrants

7. **SEMESTER & YEAR OF FIRST OFFERING** (AY2013-14 if approved by 3/1/2013; otherwise AY2014-15) Spring 2014

**8. COURSE FORMAT:**

NOTE: Course hours may not be compressed into fewer than three days per credit. Any course compressed into fewer than six weeks must be approved by the college or school's curriculum council. Furthermore, any core course compressed to less than six weeks must be approved by the core review committee.

COURSE FORMAT: (check all that apply)       1       2       3       4       5       6 weeks to full semester

OTHER FORMAT (specify)

Mode of delivery (specify lecture, field trips, labs, etc)

The course will include lectures, class discussion, text book and journal article readings, labs, in-class activities and assignments.

RECEIVED

SEP 17 2012

Dean's Office  
 College of Natural Science & Mathematics

Governance  
 9/26/12 TJP

9. CONTACT HOURS PER WEEK:  LECTURE hours/weeks  LAB hours /week  PRACTICUM hours /week

Note: # of credits are based on contact hours. 800 minutes of lecture=1 credit. 2400 minutes of lab in a science course=1 credit. 1600 minutes in non-science lab=1 credit. 2400-4800 minutes of practicum=1 credit. 2400-8000 minutes of internship=1 credit. This must match with the syllabus. See <http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures-/guidelines-for-computing-/> for more information on number of credits.

OTHER HOURS (specify type)

10. COMPLETE CATALOG DESCRIPTION including dept., number, title, credits, credit distribution, cross-listings and/or stacking (50 words or less if possible):

Example of a complete description:

FISH F487 W, O Fisheries Management  
 3 Credits Offered Spring  
 Theory and practice of fisheries management, with an emphasis on strategies utilized for the management of freshwater and marine fisheries. Prerequisites: COMM F131X or COMM F141X; ENGL F111X; ENGL F211X or ENGL F213X; ENGL F414; FISH F425; or permission of instructor. Cross-listed with NRM F487. (3+0)

BIOL 1-- X, Introduction to Human Nutrition, 4 credits.  
 An Introduction to Human Nutrition provides students with an understanding of basic nutritional science and how the principles of nutrition can be used to achieve and maintain optimum health and well-being. Students will consider their own food choices in light of the scientific concepts covered in class. May not be used as a biology elective credit for a major in biological science.  
 Prerequisites: ENGL F111X or higher; placement in DEVM F105 or higher; or permission of instructor

11. COURSE CLASSIFICATIONS: Undergraduate courses only. Consult with CLA Curriculum Council to apply S or H classification appropriately; otherwise leave fields blank.

H = Humanities  S = Social Sciences

Will this course be used to fulfill a requirement for the baccalaureate core? If YES, attach form. YES:  NO:

IF YES, check which core requirements it could be used to fulfill:  
 O = Oral Intensive, Format 6  W = Writing Intensive, Format 7  Natural Science, Format 8

11.A Is course content related to northern, arctic or circumpolar studies? If yes, a "snowflake" symbol will be added in the printed Catalog, and flagged in Banner.

YES  NO

12. COURSE REPEATABILITY:

Is this course repeatable for credit? YES  NO

Justification: Indicate why the course can be repeated (for example, the course follows a different theme each time).

How many times may the course be repeated for credit?  TIMES  
 If the course can be repeated for credit, what is the maximum number of credit hours that may be earned for this course?  CREDITS  
 If the course can be repeated with variable credit, what is the maximum number of credit hours that may be earned for this course?  CREDITS

13. GRADING SYSTEM: Specify only one. Note: Later changing the grading system for a course constitutes a Major Course Change.

LETTER:  PASS/FAIL:

**RESTRICTIONS ON ENROLLMENT (if any)**

14. **PREREQUISITES**

These will be required before the student is allowed to enroll in the course.

Reference the registration implications below due to Banner coding of these terms:  
Prerequisite: Course completed and grade of "C" (2.0) or higher prior to registering for the course that requires it.

Concurrent: Course may be taken simultaneously (and allows for a course to have been previously completed).

Co-requisite: Courses MUST be taken simultaneously and does NOT allow for fact that a course was previously completed!

15. **SPECIAL RESTRICTIONS, CONDITIONS**

16. **PROPOSED COURSE FEES**

Has a memo been submitted through your dean to the Provost for fee approval?   
Yes/No

17. **PREVIOUS HISTORY**

Has the course been offered as special topics or trial course previously?

Yes/No

If yes, give semester, year, course #, etc.:

18. **ESTIMATED IMPACT**

WHAT IMPACT, IF ANY, WILL THIS HAVE ON BUDGET, FACILITIES/SPACE, FACULTY, ETC.

19. **LIBRARY COLLECTIONS**

Have you contacted the library collection development officer (kljensen@alaska.edu, 474-6695) with regard to the adequacy of library/media collections, equipment, and services available for the proposed course? If so, give date of contact and resolution. If not, explain why not.

No

Yes

20. **IMPACTS ON PROGRAMS/DEPTS**

What programs/departments will be affected by this proposed action?  
Include information on the Programs/Departments contacted (e.g., email, memo)

21. **POSITIVE AND NEGATIVE IMPACTS**

Please specify positive and negative impacts on other courses, programs and departments resulting from the proposed action.

**JUSTIFICATION FOR ACTION REQUESTED**


The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new course applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. Use as much space as needed to fully justify the proposed course.

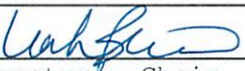
This course will contribute to UAF's growing biomedical program and responds to increasing student interest in health sciences; a recent poll of undergraduate biology students indicated that 39% are interested in a health science track within the department. This course is intended for non-majors who are interested in understanding basic nutritional science and how the principles of nutrition can be used to achieve and maintain optimum health and well-being. The foundation of nutrition science overlaps with knowledge basis of other biological, physical and social sciences which makes this course well-suited as an introductory level science course.

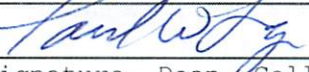
A request for a core natural science designator has been submitted concurrently with this request. Students will become familiar with applying the scientific process to nutrition. Laboratory exercises will emphasize study design, data collection, hypothesis generation, and experimentation. Students will also learn the process by which nutrition science research is translated into local and national policies that directly influence food choice and health.

I have previously taught a 300 level nutrition course that was well received. In discussions with the Biology department chair, we decided the 100 X course will serve a broader audience and will fill departmental needs.

**APPROVALS: Add additional signature lines as needed.**

|   |                    |               |
|---|--------------------|---------------|
|  | Date               | Sept 17, 2012 |
| Signature, Chair,<br>Program/Department of:                                       | Biology & Wildlife |               |

|   |      |           |
|---|------|-----------|
|  | Date | 9/25/2012 |
| Signature, Chair, College/School<br>Curriculum Council for:                         | CNSM |           |

|   |      |         |
|---|------|---------|
|  | Date | 9/26/12 |
| Signature, Dean, College/School<br>of:  | CNSM |         |

Offerings above the level of approved programs must be approved in advance by the Provost.

|  |      |      |
|--|------|------|
| <br>   | Date | <br> |
| Signature of Provost (if above level of approved programs) |      |      |

**ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE**

|   |      |      |
|---|------|------|
| <br>  | Date | <br> |
| Signature, Chair  |      |      |
| Faculty Senate Review Committee:    ___ Curriculum Review    ___ GAAC |      |      |
| ___ Core Review            ___ SADAC                                  |      |      |

**ATTACH COMPLETE SYLLABUS (as part of this application).** The guidelines are online:

<http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures-/uaf-syllabus-requirements/>

The Faculty Senate curriculum committees will review the syllabus to ensure that each of the items listed below are included. If items are missing or unclear, the proposed course (or changes to it) may be denied.

**SYLLABUS CHECKLIST FOR ALL UAF COURSES**

During the first week of class, instructors will distribute a course syllabus. Although modifications may be made throughout the semester, this document will contain the following information (as applicable to the discipline):

**1. Course information:**

Title,  number,  credits,  prerequisites,  location,  meeting time  
(make sure that contact hours are in line with credits).

**2. Instructor (and if applicable, Teaching Assistant) information:**

Name,  office location,  office hours,  telephone,  email address.

**3. Course readings/materials:**

Course textbook title,  author,  edition/publisher.  
 Supplementary readings (indicate whether  required or  recommended) and  
 any supplies required.

**4. Course description:**

Content of the course and how it fits into the broader curriculum;  
 Expected proficiencies required to undertake the course, if applicable.  
 Inclusion of catalog description is *strongly* recommended, and  
 Description in syllabus must be consistent with catalog course description.

**5.  Course Goals (general), and (see #6)**

**6.  Student Learning Outcomes (more specific)**

**7. Instructional methods:**

Describe the teaching techniques (eg: lecture, case study, small group discussion, private instruction, studio instruction, values clarification, games, journal writing, use of Blackboard, audio/video conferencing, etc.).

**8. Course calendar:**

A schedule of class topics and assignments must be included. Be specific so that it is clear that the instructor has thought this through and will not be making it up on the fly (e.g. it is not adequate to say "lab". Instead, give each lab a title that describes its content). You may call the outline Tentative or Work in Progress to allow for modifications during the semester.

**9. Course policies:**

Specify course rules, including your policies on attendance, tardiness, class participation, make-up exams, and plagiarism/academic integrity.

**10. Evaluation:**

Specify how students will be evaluated,  what factors will be included,  their relative value, and  how they will be tabulated into grades (on a curve, absolute scores, etc.)  Publicize UAF regulations with regard to the grades of "C" and below as applicable to this course. (Not required in the syllabus, but may be a convenient way to publicize this.) Faculty Senate Meeting #171:

<http://www.uaf.edu/uafgov/faculty-senate/meetings/2010-2011-meetings/#171>

**11. Support Services:**

Describe the student support services such as tutoring (local and/or regional) appropriate for the course.

**12. Disabilities Services:** Note that the phone# and location have been **updated**.

The Office of Disability Services implements the Americans with Disabilities Act (ADA), and ensures that UAF students have equal access to the campus and course materials.

State that you will work with the Office of Disabilities Services (208 WHITAKER BLDG, 474-5655) to provide reasonable accommodation to students with disabilities.



**BIOLOGY 1-- X**  
**INTRODUCTION TO HUMAN NUTRITION**  
Spring 2014; 4 Credits  
Time: TBD  
Location: TBD  
CRN: TBD

**Prerequisites:** ENGL F111X or higher; placement in DEVM F105 or higher; or permission of instructor. This course may not be used as a biology elective credit for a major in biological science.

### **Instructor Information**

Andrea Bersamin, Ph.D.  
Email: [abersamin@alaska.edu](mailto:abersamin@alaska.edu)  
Office: 234 AHRB, Telephone: (907)474-6129

### **Office Hours**

TBD. If you have questions about the class or would like to discuss your class performance, I encourage you to come and see me during my office hours (or by appointment).

### **Course description**

An Introduction to Human Nutrition provides students with an understanding of basic nutritional science and how the principles of nutrition can be used to achieve and maintain optimum health and well-being. Students will consider their own food choices in light of the scientific concepts covered in class.

### **Course goals**

To provide students with an overview of the fundamentals of human nutrition science.

### **Learning objectives**

Upon completion of this course, you will be able to do the following:

- Understand how the Dietary Guidelines, Recommended Dietary Allowances (RDA's) and Food Guide Pyramid are used in planning healthy diets for individuals and groups.
- Understand and describe the basic functions, food sources and human requirements of nutrients.
- Understand the digestion, absorption and transport of nutrients.
- Describe the factors influencing energy balance and describe the effectiveness of various weight loss and maintenance strategies.
- Evaluate personal dietary intakes and practices for nutritional adequacy and recommend strategies for improvements
- Understand the role of nutrition in health promotion and disease, particularly chronic disease prevention.
- Describe nutrition issues surrounding food safety and other consumer concerns
- Demonstrate an understanding of the role of food choice in promoting personal, community and environmental health
- Demonstrate an understanding of the scientific process and apply it to current issues in health and nutrition

## Instructional Methods

The course will include lectures, class discussion, in-class activities, text book and journal article readings, and assignments. *Student participation is important and this requires that all students come prepared having read the required readings in advance.*

This class will focus on teaching scientific concepts in addition to exploring personal decision-making. My goal is for you to consider your own food choices in light of the knowledge you are gaining. Concepts covered in class will use the following types of supplementary activities to accomplish this goal.

- **Health checks:** Activities will guide you to “check” your own behavior or health status based on the lesson content
- **Healthy lifestyle challenges:** Activities will provide ideas for new foods and activities that relate to the lesson content
- **Current controversies:** Activities will encourage you to consider two sides of a debate that relates to the lesson content and decide what side you’re on
- **Systems thinking:** Activities will encourage you to consider how your food and activity choices impact society and vice versa. Specifically you will explore the links between food choice and personal, community, and environmental health. You will also consider how local, state, and federal policies affect healthy eating and physical activity.

## Course Readings

### Required:

- “Discovering Nutrition” Fourth edition, by Insel, Ross, McMahon, Bernstein. Jones and Bartlett publishing.
- You will receive a lab manual during your first lab session that is designed to be added to a 3-ring binder (not supplied) .
- Additional readings will be assigned to supplement the main textbook or as part of various homework assignments; these will be made available on Blackboard.

### Some useful websites:

Dietary Guidelines for Americans <http://health.gov/dietaryguidelines/>

PubMed database (Medline) <http://www.ncbi.nlm.nih.gov/pubmed/>

My Plate <http://www.choosemyplate.gov/>

Linus Pauling Institute Micronutrient Information Center <http://lpi.oregonstate.edu/infocenter/>

American Dietetic Association [www.eatright.org](http://www.eatright.org)

American Society for Nutritional Sciences [www.asns.org](http://www.asns.org)

ILSI Human Nutrition Institute <http://hni.ilsa.org>

American Heart Association [www.americanheart.org/](http://www.americanheart.org/)

American Diabetes Association [www.diabetes.org/](http://www.diabetes.org/)

## Student Evaluation

### Points Possible:

|                        |                                 |
|------------------------|---------------------------------|
| Exams                  | 3 @100 points                   |
| Final Exam             | 100 points                      |
| Reaction cards         | 2 point each (maximum of 20pts) |
| Laboratory Assignments | 200 points                      |

Total Possible Points: **620**

### Grades will be on a straight percentage basis.

A= 94-100%; A-=90-93.9%

B+= 87-89.9%; B= 84-86.9% ;B-= 80-83.9%

C+= 77-79%; C= 74-76.9% ; C-= 70-73.9 %

D+= 67-69%; D = 64-66.9%; D-= 60-63.9%

F= 59% and below

## Instructor and course evaluation:

Teaching is a learning process and it is impossible to facilitate learning without student feedback. I will be gathering feedback throughout the semester that will allow me to address problems or difficulties while the course is on-going. Unsolicited constructive feedback is welcome anytime.

## Course Requirements

**Exams:** There will be 3 in-class exams and a final exam. Exams will include T/F, multiple-choice, matching, short answer and essay questions. Exams will be based on lectures, readings, labs and assignments. There will be NO make-up exams. Under very unusual circumstances early exams will be offered with approval from the instructor; arrangements must be made well in advance.

**Assignments:** Assignments will be posted on Blackboard and detailed instructions will be provided in class. Paper copies of your completed assignments are due at the **beginning** of class on the due date. No late assignments will be accepted. If you are not able to turn in an assignment due to extenuating circumstances (i.e. medical emergency for which you have a doctor's note), please come and see me during my office hours or by appointment.

### Readings:

In-class discussions and activities will require that you have completed the required readings. The course reading list is included in the syllabus. Additional readings (e.g. newspaper articles, journal articles, policy briefs, etc.) will be assigned throughout the semester and will be provided as hand-outs or posted on Blackboard. **Student participation is important and this requires that all students come prepared having read the required readings in advance.**



## **Labs**

You are required to attend the lab section in which you are officially enrolled. If you need to change lab sections, you must officially change your section enrollment through the Registrar. You are expected to be on time to labs. Assignments are collected at the **start** of lab; work turned in after that is considered late. You must be present for lab in order to earn any credit for the work on that lab; in other words, if you aren't at lab one week, you can't turn in the work for that lab and will receive a zero on it.

**Reaction cards:** 2 point each for a maximum of 20 points

At the end of each class session on Thursdays, please write a short (two to three sentences) question or comment pertaining to the class discussion or provide feedback on how the class is going for you. Write your comment or question on a 3x5 card with your full name and date printed clearly at the top of the card. Please give your card to me before leaving the class. You are responsible for buying (or sharing with a friend) a pack of 3x5 cards to use for this purpose.

## **Current events (extra credit):**

Throughout the course, you have the opportunity to earn up to ten extra credit points by bringing a newspaper or internet article related to a topic covered in class, summarizing its contents for the class, and providing a one paragraph written summary. Current events must have been published within the last year. You will earn five points for each current event article and summary. Written and oral summaries should, at minimum:

- State the objectives of the study
- Summarize the study design and findings
- Provide a copy of original article (if available) to me (preferably as a PDF)
- Provide your opinion on how the "average" reader will respond to the article. Will the article influence decision making or thinking? Does the article leave out any important information?

## **Course Policies**

**Communication:** Announcements and schedule changes will be made by e-mail or on Blackboard. It is your responsibility to check your e-mail or Blackboard at least twice weekly. I encourage you to contact me with any comments or questions. If you don't understand something please ask.

**Attendance:** Daily attendance and participation are expected.

## **Withdrawal:**

Feb. 1: Deadline for 100 percent refund of tuition and fees

Feb. 1: Deadline for student-initiated and faculty-initiated drops (course does not appear on academic record)

Mar. 22: Deadline for student-initiated and faculty-initiated withdrawals (W grade appears on academic transcript)

**Honor Code and Plagiarism:** You are expected to uphold the UAF standard of conduct for students relating to academic dishonesty. You assume full responsibility for the content and

integrity of the academic work you submit. For the student code or additional information, please use the following URL <http://www.uaf.edu/catalog/current/academics/regs3.html>

### **UAF Disability Services**

Disabilities Services: The Office of Disability Services implements the Americans with Disabilities Act (ADA), and insures that UAF students have equal access to the campus and course materials. I will work with the Office of Disabilities Services (208 WHIT, 474-5655) to provide reasonable accommodation to students with disabilities. **\*\* If you require any assistance due to documented disability, please let me know by the 2<sup>nd</sup> week of classes and I will be happy to make whatever accommodations are necessary.**

## **Detailed schedule of topics, concepts, key terms, readings, and assignments**

Concepts and key terms are provided for each week of the course, and these should be used to ensure that you've understood the reading materials and lectures.

### **Introduction to Nutrition--Food choices: Nutrients and nourishment January 17 and 22**

#### **Objectives:**

- Describe the ecological model and how it can be used as a framework to understand how people choose what to eat
- Define the 6 classes of nutrients and understand the key differences between macro and micronutrients
- Apply the scientific process to nutrition

#### **Readings:**

Chapter 1

#### **Activities:**

*Current controversy:* Food marketing to children

### **Nutrition Guidelines: tools for designing a healthy diet January 24 and 29**

#### **Objectives:**

- Discuss the principles of Nutrition guidelines and assessment
- Explain dietary standards and define the four standards that compose the dietary reference intakes (DRIs)
- Describe the five mandatory components of a food label and discuss how food labels can be used to plan a healthful diet
- Describe nutrition assessment methods

#### **Readings:**

Chapter 2

**Activities:**

*Current controversy:* Menu labeling: good idea for consumers or unnecessary burden on restaurants

**Complementary Nutrition: Functional foods and dietary supplements  
January 31 and February 5**

**Objectives:**

- Define functional foods and discuss their role in health promotion
- Define food additives and understand their regulation by the FDA
- Evaluate the pros and cons of taking dietary supplements

**Readings:**

Chapter 3

**Digestion, absorption and transport: from food to fuel  
February 7 and 12**

**Objectives:**

- Describe the organization of the gastrointestinal track
- Review the physical and chemical processes involved in digestion and absorption
- Describe and understand the roles of the assisting organs

**Readings:**

Chapter 4

**EXAM I  
FEBRUARY 14**

**Carbohydrates  
February 19 and 21**

**Objectives:**

- Describe the functions, types, food sources and recommendations
- Explain the digestion and absorption
- Discuss the role of carbohydrates in promoting health

**Readings:**

*Health Challenge:* Increase your consumption of whole grains

*Current controversies:* High fructose corn sweetener: just another sweetener or a nutrition demon

*Systems thinking:* The farm bill

*Health Check:* Are you at risk for diabetes

**Readings:**

Introduction to Human Nutrition, Biology 1--X : tentative syllabus (subject to change)

Bersamin Spring 2014

## Chapter 5

### Lipids

February 26 and 28

#### Objectives:

- Describe the functions, types, food sources and recommendations
- Explain the digestion and absorption
- Discuss the role of lipids in promoting health

#### Activities

*Systems thinking:* Transfats

*Health check:* Cardiovascular disease, are you at risk?

*Current controversies:* Farm raised or wild caught, which salmon is king?

#### Readings:

Chapter 6

### Proteins

March 5 and 7

#### Objectives:

- Describe the functions, types, food sources and recommendations
- Explain the digestion and absorption
- Discuss the role of protein in promoting health

#### Activities:

*Health challenge:* Legumes!

*Health check:* How much protein do you need each day?

*Current controversies:* Organic, free range, grass fed: what does it all mean?

#### Readings:

Chapter 7

### Spring Break

March 12 and 14

### Energy Balance

March 19 and 21

#### Objectives:

- Discuss the regulation of food intake
- Describe the major components of energy expenditure
- Describe the major issues in defining and measuring body weight and composition
- Discuss the effects and implications of obesity

**Readings:**

Chapter 8

**Activities:**

*Health check:* Mindful vs mindless eating

*Systems thinking/ health challenge:* Make your own 100- calorie packs

Exam II

March 26

**Vitamins: vital keys to health**

March 28 and April 2

**Objectives:**

- Compare the water and fat soluble vitamins with respect to their function, digestion, absorption, transport, and requirements
- Explain the function, food sources, and requirements of select vitamins
- Define antioxidants and discuss their food sources and health benefits

**Readings:**

Chapter 9

*Current controversies:* Organic or conventional produce

*Systems thinking:* Community gardens

**Water and Minerals**

April 4 and 9

**Concepts and key terms:**

- Describe the functions of water and its recommended intake
- Describe the difference between major and trace minerals
- Explain the function, food sources, and requirements of select minerals

**Readings:**

Chapter 10

**Activities:**

*Health check:* Create a personal beverage clock

*Current controversy:* Tap, filtered or bottled water: which is best?

**Food Safety and Technology**

April 11 and 16

**Concepts and key terms:**

- Review major food safety hazards
- Describe the government's and the consumer's role in keeping food safe
- Simulate an investigation of a foodborne illness outbreak

**Readings:**

Chapter 14



**Activities:**

*Current controversies:* Genetically modified foods

*Systems thinking:* Don't waste food, but keep it safe

**Food Systems: linking food choice to personal and environmental health****April 18 and 23****Concepts and key terms:**

- Describe the food system and food supply chain
- Describe the relationships between food, health, justice and the natural and built environments

**Readings:**

Feenstra, GW. (1997) Local food systems and sustainable communities. *American Journal of Alternative Agriculture*. 12;1 pp28-36

Ericksen, PJ. (2008) Conceptualizing food systems for global environmental change research. *Global Environmental Change*. 18 pp 234-245

A Primer on Community Food Systems: Linking Food, Nutrition and Agriculture.

<http://www.discoverfoodsys.cornell.edu/primer.html>

**Physical activity****April 25 and 30****Concepts and key terms:**

- Understand current trends in physical activity levels and national recommendations
- Understand the role of physical activity in human health
- Understand the role of the built environment in promoting physical activity

**Activity:**

*Health check:* Calculate your total daily energy expenditure

**Exam III****May 2**