

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:

Department	Biology	College/School	CNSM
Prepared by	Andrea Bersamin	Phone	907-474-6129
Email Contact	abersamin@alaska.edu	Faculty Contact	Andrea Bersamin

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

2. COURSE IDENTIFICATION: Dept **BIOL** Course # **194** No. of Credits **3**

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**

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

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

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

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

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 2013**

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, in-class activities and assignments.**

9. CONTACT HOURS PER WEEK: **3** 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

Leah Berman
 9/12/12 *TLF*

RECEIVED

SEP 11 2012

Dean's Office

College of Natural Science & Mathematics

Governance
 9/14/12 *TLF*

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 194, Introduction to Human Nutrition, 3 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:

x

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

x

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**

ENGL F111X or higher; placement in DEVM F105 or higher; or permission of instructor

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**

None

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

No

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

18. ESTIMATED IMPACT

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

Classroom space will be needed. The course will be taught as part of the instructor's regular workload.

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

X

Anne Christie created a library guide for a nutrition course I taught in 2011 that is also well suited for this class. Additional library resources are not needed.

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)

Biology and Wildlife will house the course. Allied Health offers a 200 level nutrition course (health 203) that I have taught previously. The proposed 100 level nutrition course is unlikely to negatively impact the Allied Health offering and vice versa since the pool of students will be different for the respective courses. The Allied Health course is a pre-requisite for nursing students, and they represent the majority of students. The proposed 100 level course will serve a broader audience of non-majors. The long-term goal is for the proposed course to satisfy the natural science core requirement (please see the course justification below for more details).

21. POSITIVE AND NEGATIVE IMPACTS

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

This course offers an applied approach to a biological science that complements the biology curriculum. The long-term goal is for the proposed course to satisfy the natural science core requirement. No negative impacts are anticipated. This course will be part of the instructor's regular workload.

JUSTIFICATION FOR ACTION REQUESTED

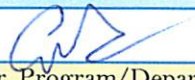
The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new course applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory.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

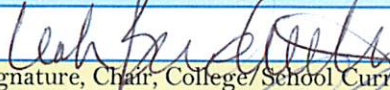
This course will contribute to UAF's growing biomedical program and responds to increasing student interest in health sciences; a recent poll of undergraduate biology students indicated that 39% are interested in a health science track within the department. This course is intended for students who are 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.

The long-term goal is for the proposed course to satisfy the core natural science requirement. A 'new course' and 'core designator' request will be submitted by October 4 for consideration for Spring 2014. In-class activities "tested" in this proposed trial course will be developed into full labs for the new course.

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

APPROVALS: Add additional signature lines as needed.

	Date	Sept 11, 2011
Signature, Chair, Program/Department of:	Biol & Wildl.	

	Date	Sept 14 2012
Signature, Chair, College/School Curriculum Council for:	CNSM	

	Date	Sept 14, 2012
Signature, Dean, College/School of:	CNSM	

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

	Date	
Signature of Provost (if above level of approved programs)		

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

	Date	
Signature, Chair		
Faculty Senate Review Committee: <input type="checkbox"/> Curriculum Review <input type="checkbox"/> GAAC		
<input type="checkbox"/> Core Review <input type="checkbox"/> SADAC		

ADDITIONAL SIGNATURES: (As needed for cross-listing and/or stacking)

	Date	
Signature, Chair, Program/Department of:		

	Date	
Signature, Chair, College/School Curriculum Council for:		

	Date	
Signature, Dean, College/School of:		

BIOLOGY 194
INTRODUCTION TO HUMAN NUTRITION
Spring 2013; 3 Credits
Time: TBD
Location: TBD
CRN: TBD

Prerequisites: ENGL F111X or higher; placement in DEVM F105 or higher; or permission of instructor. 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
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.
- EatRight Analysis, Version 12.0 CD-ROM, Jones and Bartlett publishing.
- 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

American Society for Nutritional Sciences www.asns.org

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

American Heart Association www.americanheart.org/

American Diabetes Association www.diabetes.org/

Student Evaluation

Points Possible:

Exams	3 @100 points
Final Exam	100 points
Reaction cards	2 point each (maximum of 20pts)
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.**

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 2nd 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

Assignment

"Healthy eating is cool" marketing campaign: **DUE: January 31**

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

Assignment:

Personal nutrition and activity portfolio. Note: this is an ongoing project that will be completed over the course of the semester. The complete portfolio is **DUE: April 18**

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:

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

Low fat dressings

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!

Vegetarian diets

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

Assignment

What are your attitudes towards obesity? Implicit Association Test is an anonymous online survey that assesses: <https://implicit.harvard.edu/implicit/demo/takeatest.html> **DUE: March 28**

**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

Organic or conventional produce

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:

Availability of sugar sweetened beverages

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.discoverfoodsyst.cornell.edu/primer.html>

Activities:

Can what you eat affect the environment

Physical activity

April 25 and 30

Concepts and key terms:

-

Readings:

Calculate your total daily energy expenditure

Try a new physical activity

Built environment

Exam III

May 2

Lab schedule:

January 23

January 30

February 6

February 13

February 20

February 27

March 6

March 20

March 27

April 3

April 10

April 17

April 24

May 1