

Submit original with signatures + 1 copy + electronic copy to UAF Governance.

See <http://www.uaf.edu/uafgov/faculty/cd> 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	474-6129
Email Contact	abersamin@alaska.edu	Faculty Contact	Andrea Bersamin

1. ACTION DESIRED

(CHECK ONE):

Trial Course

☒

New Course

2. COURSE IDENTIFICATION:

Dept

Biology

Course #

No. of Credits

3

Justify upper/lower division status & number of credits:

This course has biology F100X or 103X or 115X or permission of instructor as a prerequisite. 3 hours of instruction will be provided per week

3. PROPOSED COURSE TITLE:

Introduction to Human Nutrition

4. CROSS LISTED?

YES/NO

☐ NO

If yes, Dept:

Course #

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

5. STACKED?

YES/NO

☐ NO

If yes, Dept:

Course #

6. FREQUENCY OF OFFERING:

Every Spring

(Every or Alternate) Fall, Spring, Summer — or As Demand Warrants

7. SEMESTER & YEAR OF FIRST OFFERING (if approved)

Spring 2010

Received

SEP 18 2009

Dean's Office

College of Natural Science & Mathematics

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 one)

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

☒ 6

6 weeks to full semester

OTHER FORMAT (specify)

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

Lectures, readings, presentations, in-class 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/cd/credits.html> for more information on number of credits.

OTHER HOURS (specify type)

N/A

10. COMPLETE CATALOG DESCRIPTION including dept., number, title and credits (50 words or less, if possible):

BIOL 2XX ,O/2, Introduction to Human Nutrition, 3 credits. The Science of Nutrition provides an integrated overview of the requirements, recommendations and functions of macronutrients, vitamins and minerals that are determinants of health and diseases in human populations.

11. COURSE CLASSIFICATIONS: (undergraduate courses only. Use approved criteria found on Page 10 & 17 of the manual. If justification is needed, attach on separate sheet.)

H = Humanities ☐

N = Natural Science ☒

S = Social Sciences ☐

Will this course be used to fulfill a requirement for the baccalaureate core? ☒ YES ☐ NO

If YES, check which core requirements it could be used to fulfill:

O = Oral Intensive, Format 6 ☒ O/2

W = Writing Intensive, Format 7 ☐

Natural Science, Format 8 ☐

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 with variable credit, what is the maximum number of credit hours that may be earned for this course?

CREDITS

13. GRADING SYSTEM:

LETTER: ☒

PASS/FAIL: ☐

RESTRICTIONS ON ENROLLMENT (if any)

14. PREREQUISITES

Biology 100X or 103X or 115X or the equivalent or permission from instructor

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

RECOMMENDED

Classes, etc. that student is strongly encouraged to complete prior to this course.

15. SPECIAL RESTRICTIONS, CONDITIONS

N/A

16. PROPOSED COURSE FEES

\$0

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

N/A

17. PREVIOUS HISTORY

Has the course been offered as special topics or trial course previously? Yes/No

Y

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

I taught a similar course through the allied health department Spring 2009 (Health 203). The proposed course will have a stronger emphasis on research methods and will involve reading and presenting articles from high impact nutrition (and nutrition-related) journals.

18. ESTIMATED IMPACT

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

Classroom space will be needed

19. LIBRARY COLLECTIONS

Have you contacted the library collection development officer (ffklj@uaf.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

☒

August 24, 2009 contacted Anne Christie

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 similar course (health 203) for nursing

students; the proposed 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.

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. 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. The course will take an integrative approach to teaching nutrition and will draw on principles from biology, chemistry, epidemiology, and public health. Nutrition is an important course for not only the growing number of premed students, but all students are likely to benefit through its applied nature. The course will likely appeal to students in the biology department. I taught a similar class through TVC in spring 2009 and several biology majors enrolled. I've also sent a short survey to members of the premed society asking about their interest in the class and have received enthusiastic responses. I would like to offer the course at the 200 level and understand that the biology department has a need for courses at this level. A request for an O/2 designation accompanies this trial course proposal.

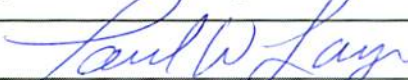
APPROVALS:

 Date 9/18/09

Signature, Chair, Program/Department of: Biology + wildlife

 Date 9/18/09

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

 Date 9/18/09

Signature, Dean, College/School of: CNSM

 Date 

Signature of Provost (if applicable)

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

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

 Date 

Signature, Chair, UAF Faculty Senate Curriculum Review Committee

ADDITIONAL SIGNATURES: (If required)

	Date	
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Signature, Chair, Program/Department of:

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

	Date	
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Signature, Dean, College/School of:

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Biology 2XX

Introduction to Human Nutrition

Spring 2010- 3 Credits

Time: TBD

Location: TBD

Prerequisite: Biology 100X or 103X or 115X or permission of instructor

Instructor Information

Andrea Bersamin, Ph.D. is an assistant professor at the Institute of Arctic Biology and the Center for Alaska Native Health Research
Email: abersamin@alaska.edu
Office Hours: by appointment
Office: 234 AHRB
Telephone: (907)474-6129

Course description

The Science of Nutrition provides an integrated overview of the requirements, recommendations and functions of macronutrients; vitamins and minerals that are determinants of health and diseases in human populations. Nutrition is an interdisciplinary field so we will draw on principles from biology, epidemiology, chemistry, public health and health policy. Current nutritional controversies will be evaluated.

Topics may include:

Are dietary supplements safe? ...Are they necessary?
Fad diets: do they work?
Vitamins: how much is enough?
My bread has high fructose corn syrup in it... should I be scared?
What is a trans fat?

Course goals

To provide students with an overview of the principles of human nutrition.

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 individual groups.
- Understand and describe the basic functions, food sources and human requirements of nutrients.
- Understand the digestion, absorption and transport of nutrients.
- Understand the basic metabolism of nutrients and energy-yielding pathways.
- 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.
- 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 discussions, experiential assignments, and oral presentations.

Course Readings

Required:

- "Nutrition Concepts and controversies" 11th edition bySizer and Whitney. Brooks Cole publishing.
- Diet Analysis Plus 9.0 Windows/Macintosh CD-ROM (CD-ROM), Wardlaw
- "Food fight: the inside story of the food industry, America's obesity crisis and what we can do about it" by Kelly Brownell. McGraw Hill Publishers.

Student Evaluation

Points Possible:

Exams	3 @100 points
Diet analysis	100 points
10 minute oral scientific presentation	40 points
5 minute oral presentation of chapter's key points	10 points

A Oral
component = 11%
of final grade

Total Possible Points: 450

Grades will be on a straight percentage basis.

A= 90-100%

B= 80-89%

C= 70-79%

D= 60-69%

F= 59% and below

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.

Exams: There will be 2 midterm exams and 1 comprehensive final exam. Exams will include T/F, multiple-choice, matching, and essay questions. Exams will be based on lectures, readings, 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.



**FINAL EXAM IS SCHEDULED FOR:
TBD**



Assignments

The Diet Analysis Project includes an analysis and critical evaluation of your 3-day food intake using the *Diet Analysis* Program. This assignment will be DUE IN TWO PARTS. Detailed instructions will be provided in class. Late projects will go down 10% for each day late.

One 10 minute oral scientific presentation of a peer reviewed journal article focusing on diet and a chronic disease. Students will moderate a Q/A session for one presentation. Detailed instructions will be provided in class. Students will receive written feedback from the instructor and peers.

C and D

Approximately every other week we will be discussing "Food Fight" (FF on syllabus). You will be responsible for presenting a 5 minute summary of one section's key points during the semester. Students will receive written feedback from the instructor.

Science of Nutrition, Biology XX: tentative syllabus (subject to change)

B and D

Bersamin Spring 2010

Extra Credit: Extra-credit opportunities will be available throughout the course. They will be presented in class, unannounced.

Withdrawal:

Jan. 29: Deadline for 100 percent refund of tuition and fees

Feb. 5: Deadline for student-initiated and faculty-initiated drops (course does not appear on academic record)

Feb. 5: Deadline for 50 percent refund of tuition (tuition only, no fees refunded)

Mar. 26: Deadline for student-initiated and faculty-initiated withdrawals (W grade appears on academic transcript)

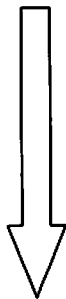
Honor Code and Plagiarism: You are expected to uphold the UAF standard of conduct for students relating to academic dishonesty. You assume full responsibility for the content and integrity of the academic work they submit. For the student code or additional information, please use the following URL <http://www.uaf.edu/catalog/current/academics/regs3.html>

Support Services

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 (203 WHIT, 474-7043) 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 BELOW, NEXT PAGE



WEEK	LECTURE TOPICS	READING	IMPORTANT DATES
January 21	Overview of nutrition	Chapter 1	
January 26	Nutrition tools- standards and guidelines	Chapter 2	FF ch. 1 discussion
January 28	Digestion, Absorption and Transport	Chapter 3	
February 2	Carbohydrate	Chapter 4	
February 4	Carbohydrate	Chapter 4	FF ch. 2 discussion
February 9	King Corn		
February 11	Lipids	Chapter 5	
February 16	Lipids	Chapter 5	FF ch. 3 discussion
February 18	Protein	Chapter 6	Diet analysis part 1 DUE
February 23	Exam review		
February 25	Exam 1		Exam 1
March 2	Overview of vitamins and minerals	Chapter 8 and 9 (excerpts)	
March 4	Nutrients involved in energy metabolism	b-vitamins*	FF ch. 5 discussion
March 9 & 11	SPRING BREAK		
March 16	Nutrients involved in bone health	Calcium, vitamins D and K*	
March 18	Nutrients involved in antioxidant function	Vitamins E, C, A, selenium*	
March 23	Nutrients involved in fluid and electrolyte balance	Sodium, potassium, chloride phosphorus*	Diet analysis part 2 DUE
March 25	Nutrients involved in blood health and immunity	Iron, zinc, folate, vitamin B ₁₂ *	FF ch. 9 discussion
March 30	Exam review		
April 1	Exam 2		Exam 2
April 6	Study design	Excerpt : e-reserves	
April 8	how to find and critically read a journal article	Branson, Anatomy of a Research Paper, Respir Care 2004; 49 (10)	
April 13	Current nutrition controversies		FF ch. 10 discussion
April 15	Energy balance/ effective presentations	Chapter 7	
April 20	Energy balance	Chapter 7	
April 22	Class presentations	Journal articles	FF ch. 11 discussion
April 27	Class presentations		
April 29	Class presentations		
May 4	Class presentations		

May 6	Final review		
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***This course uses an applied approach which organizes vitamins and minerals based on their functions and effects on the body.Sizer and Whitney, your text book authors, use a more traditional approach which organizes vitamins and minerals based on their chemical properties. Readings on the specific vitamins and minerals will be drawn from chapters 7 and 8.**