NUFD 113: NUTRITION AND METABOLISM

In Workflow

1. FACS Committee Chair (shiltsm@csus.edu)
2. FACS Chair (wbuchan@csus.edu)
3. SSIS College Committee Chair (tristan.josephson@csus.edu)
4. SSIS Dean (mendriga@csus.edu)
5. Academic Services (torsetj@csus.edu; cnewsome@skymail.csus.edu)
6. Senate Curriculum Subcommittee Chair (curriculum@csus.edu)
7. Council on the Preparation of School Personnel Chair (mae.chaplin@csus.edu)
8. GE Crs Rev Subcomittee Chair (angela.leslie@csus.edu)
9. Dean of Undergraduate (james.german@csus.edu; celena.showers@csus.edu)
10. Dean of Graduate (cnewsome@skymail.csus.edu)
11. Catalog Editor (torsetj@csus.edu)
12. Registrar's Office (wlindsey@csus.edu)
13. PeopleSoft (PeopleSoft@csus.edu)

Approval Path

1. Wed, 14 Apr 2021 23:13:14 GMT
   Mical Shilts (shiltsm): Approved for FACS Committee Chair
2. Wed, 14 Apr 2021 23:15:34 GMT
   Lynn Hanna (lhanna): Approved for FACS Chair
3. Wed, 28 Apr 2021 19:56:18 GMT
   Tristan Josephson (tristan.josephson): Rollback to Initiator
4. Fri, 07 May 2021 19:12:58 GMT
   Mical Shilts (shiltsm): Approved for FACS Committee Chair
5. Fri, 07 May 2021 23:39:46 GMT
   Lynn Hanna (lhanna): Approved for FACS Chair
6. Fri, 03 Sep 2021 23:08:42 GMT
   Tristan Josephson (tristan.josephson): Approved for SSIS College Committee Chair
7. Thu, 09 Sep 2021 16:56:49 GMT
   Marya Endriga (mendriga): Approved for SSIS Dean

Date Submitted: Wed, 05 May 2021 21:21:59 GMT

Viewing: NUFD 113 : Nutrition And Metabolism

Last edit: Wed, 05 May 2021 21:21:57 GMT

Changes proposed by: Wendy Buchan (101043939)

Contact(s):

Name (First Last)	Email	Phone 999-999-9999
Wendy Buchan	wbuchan@csus.edu	916-278-6732

Catalog Title:
Nutrition And Metabolism

Class Schedule Title:
Nutrition And Metabolism

Academic Group: (College)
SSIS - Social Sciences & Interdisciplinary Studies

Academic Organization: (Department)
Family and Consumer Sciences

Will this course be offered through the College of Continuing Education (CCE)?
No

Catalog Year Effective:
Fall 2021 (2021/2022 Catalog)

Subject Area: (prefix)
NUFD - Nutrition and Food

Catalog Number: (course number)
113

Course ID: (For administrative use only.)
132986

Units:
3

In what term(s) will this course typically be offered?
Fall, Spring, Summer

Does this course require a room for its final exam?
Yes, final exam requires a room

Does this course replace an existing experimental course?
No

This course complies with the credit hour policy:
Yes

Justification for course proposal:
When the Nutrition and Food concentration became a degree to comply with an executive order, all our courses converted from a prefix of FACS to NUFD; however, the prerequisites listed for each course did not change. Therefore this class lists FACS 10 as one of the prerequisites but that course is now titled NUFD 10. The discrepancy is confusing to students.

Additionally, we would like to add BIO 2 as one of the options for biology as since biology majors added that as the option for biology we have been manually approving it as meeting the prerequisite for biology to take this course.
Lastly we have updated the learning outcomes to the current suggested format.

Course Description: (Not to exceed 80 words and language should conform to catalog copy.)
Study of the structures, types and metabolism of carbohydrates, lipids and proteins. Discussion of the biological roles of vitamins and minerals. Application and integration of metabolic knowledge with health promotion and chronic disease.

Are one or more field trips required with this course?
No

Fee Course?
No

Is this course designated as Service Learning?
No

Does this course require safety training?
No

Does this course require personal protective equipment (PPE)?
No

Does this course have prerequisites?
Yes

Prerequisite:
NUFD 10; BIO 2 or BIO 10 or BIO 20; and Chem 1A or Chem 5 or Chem 6a

Prerequisites Enforced at Registration?
Yes

Does this course have corequisites?
No

Graded:
Letter

Approval required for enrollment?
No Approval Required

Course Component(s) and Classification(s):
Discussion

Discussion Classification
CS#02 - Lecture/Discussion (K-factor=1WTU per unit)
Discussion Units
3

Is this a paired course?
No

Is this course crosslisted?
No

Can this course be repeated for credit?
No

Can the course be taken for credit more than once during the same term?
No

Description of the Expected Learning Outcomes: Describe outcomes using the following format: "Students will be able to: 1), 2), etc."
1. Students will identify and recognize the biochemical functions of macro and micro nutrients.
2. Students will be able to identify and recognize the process of the digestion and absorption of nutrients in the human living system.
3. Students will be able to identify, apply and analyze metabolic processes, pathways and utilization of nutrients at the cellular level.
4. Students will examine the principles underlying relationship between nutrition and disease in the human living system.
5. Students will use a computerized nutritional analysis program to critically analyze the nutrient adequacy & composition of your own diet.
6. Students will apply use of the peer review process in formulating a critical analysis of a nutrient related health outcome using methodologies of scientific inquiry.
7. Students will be able to identify and recognize steps of the Nutrition Care Process and create a PES statement.
8. Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-based practice decisions.
9. Use current information technologies to locate and apply evidence-based guidelines and protocols.
10. Apply critical thinking skills.
11. Demonstrate effective and professional oral and written communication and documentation.
Area B5 GE: Students will be able to do one or more of the following:
· Cite critical observations, underlying assumptions and limitations to explain and apply important ideas and models in one or more of the following: physical science, life science, mathematics or computer science.
· Recognize evidence-based conclusions and form reasoned opinions about science-related matters of personal, public and ethical concern.
· Discuss historical or philosophical perspectives pertaining to the practice of science or mathematics.

Assessment Strategies: A description of the assessment strategies (e.g., portfolios, examinations, performances, pre-and post-tests, conferences with students, student papers) which will be used by the instructor to determine the extent to which students have achieved the learning outcomes noted above.
I. There will be two exams and seventeen quizzes. (course objectives 1, 2, 3, 4, 6).
using your e-text access or Canvas using the student's saclink account outside of class. Please use a reliable fast internet connection or a campus computer to take quizzes and exams.
II. Four assignments (details and instructions provided under assignments on the text website or Canvas) and Discussions:
1. Discussions – there are several discussions posted that you must complete for credit towards course points as well as assigned peer reviews on other students discussions to earn full credit.
2. Assignment 1 Student Diet Analysis: (Diet Analysis program). Each student will be required to record and analyze a three day activity and food record using a diet analysis program per assignment 1 instructions. Instructions for how to complete the analysis and report are available on the text website and Canvas. Reports are to include results of the nutrient analysis of food record project, answers to questions to be provided, interpretation of results (data) as instructed on assignment downloaded from the text website or Canvas. You will apply the Nutrition Care Process and develop a PES statement(s) about your self assessment. A hypothesis or question about your diet and health for your research paper should be included please be sure to read the assignment and complete all components listed on assignment 1 on the text website or Canvas (objectives 1, 3, 4, 5, 7, 9 and 11)
3. Assignment 2 Peer Review Draft Student Research Topic Paper. This MUST be turned into Canvas You will use your hypothesis about a nutrient/ nutritional supplement or other consumed substance effect on one aspect of health (it may be identified from

assignment 1) to complete your research topic paper with peer reviewed research study references into Canvas assignments. Instructions on the text website or Canvas - you must review several credible references properly cited. (course objectives 1, 4, 6, 8, 9, 10).
4. Assignment 3 Peer Review three student research topic papers. You will review three other student research topic papers and provide feedback - see instructions for peer review under assignments 3.
5. Assignment 4 final Research Topic Paper: You will use your hypothesis about a nutrient/ nutritional supplement or other consumed substance effect on one aspect of health (it may be identified from assignment 1 and use feedback from assignment 3 plus Turnitin input on originality and grammar) to complete your final research paper with peer reviewed research study references. This MUST be turned into Canvas Turnitin under assignments. Students should submit papers to Turnitin assignments without identifying information included in the paper (e.g. name or student number), the system will automatically show this info to faculty in your course when viewing the submission, but the information will not be retained by Turnitin. Student submissions will be retained in the global Turnitin repository. It is important to use the feedback from Turnitin on originality and grammar to edit, as well as peer feedback and revise your draft research paper for your final research paper. Instructions on the text website or Canvas. You must review several credible references and at least three peer reviewed research studies on your topic and properly cite them for this assignment. Turnitin will provide you with feedback on grammar and similarity which you can use to improve/ edit your paper up until the due date for the final version to be graded as it will be graded based on grammar/ use of English language, ensuring it is your own writing and words, a proper hypothesis on a nutrient with development of the research and critique of the methods and results found to draw an evidence based conclusion using proper citation to give proper credit to your sources within the paper (course objectives 1, 4, 6, 8, 9, 10 and 11).

Is this course required in a degree program (major, minor, graduate degree, certificate?)

Yes

Has a corresponding Program Change been submitted to Workflow?

No

Identify the program(s) in which this course is required:

Programs:
BS in Nutrition and Food
BS in Nutrition and Food (Dietetics)

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer)?

No

Will there be any departments affected by this proposed course?

No

I/we as the author(s) of this course proposal agree to provide a new or updated accessibility checklist to the Dean's office prior to the semester when this course is taught utilizing the changes proposed here.

I/we agree

University Learning Goals

Undergraduate Learning Goals:

Competence in the disciplines
Intellectual and practical skills

Graduate (Masters) Learning Goals:

Critical thinking/analysis
Disciplinary knowledge

Is this course required as part of a teaching credential program, a single subject, or multiple subject waiver program (e.g., Liberal Studies, Biology) or other school personnel preparation program (e.g., School of Nursing)?

Yes

For the Council for the Preparation of School Personnel (to be filled out with assistance of your department chair):

Does this course change impact your department's currently written Program Standards Document?

No

Common Standards: In what way does this course or program change impact the currently written Common Standards document? Please include any suggested language changes:

No change at all as it is simply updating the prerequisites for an existing course.

Is this change in response to program or unit assessment activities?

No

Will this course introduce any new or changes to program assessments?

No

GE Course and GE Goal(s)

Is this a General Education (GE) course or is it being considered for GE?

Yes

In which GE area(s) does this apply?

B5. Further Studies in Physical Science, Life Forms and Quantitative Reasoning (Upper Division Only)

Which GE objective(s) does this course satisfy?

Find and use common information resources, engage in specialized library research, use computers and seek out appropriate expert opinion and advice.
Gain a general understanding of current theory, concepts, knowledge, and scientific methods pertaining to the nature of the physical universe, ecosystems, and life on this planet.

Attach Course Syllabus with Detailed Outline of Weekly Topics:

2021newNutrition and Metabolismsection2inclass.docx

Syllabi must include: GE area outcomes listed verbatim; catalog description of the course; prerequisites, if any; student learning objectives; assignments; texts; reading lists; materials; grading system; exams and other methods of evaluation.

Will more than one section of this course be offered?

Yes

Provide a description of what would be considered common to all sections and what might typically vary between sections:

They will all have the same required reading, topics, and assignments to cover all the same learning outcomes in all sections.

Please write a statement indicating the means and methods for evaluating the extent to which the objectives of the GE Area(s) and any writing requirements are met for all course sections:

All courses will use the same assessment methods and use the same quizzes, assignments and grading rubrics. The research topic paper will cite critical observations, underlying assumptions and limitations to explain and apply important ideas and models in one or more of life science and will recognize evidence-based conclusions and form reasoned opinions about science-related matters of personal concern. A grading rubric will be used to evaluate all of the written research topic papers across all sections ensuring that all students cite evidence based research analyzing and discussing limitations and assumptions and form reasoned opinions about a nutrition health topic.
Assignment 2 Peer Review Draft Student Research Topic Paper: This MUST be turned into Canvas You will use your hypothesis about a nutrient/ nutritional supplement or other consumed substance effect on one aspect of health (it may be identified from assignment 1) to complete your research topic paper with peer reviewed research study references into Canvas assignments. Instructions on the text website or Canvas - you must review several credible references properly cited. (meets course objectives 1, 4, 6, 8, 9, 10 and 11,as well as GE objectives of Cite critical observations, underlying assumptions and limitations to explain and apply important ideas and models in one or more of the following: physical science, life science, mathematics or computer science. Recognize evidence-based conclusions and form reasoned opinions about science-related matters of personal, public and ethical concern.)

Assignment 3 Peer Review three student research topic papers. You will review three other student research topic papers and provide feedback - see instructions for peer review under assignments 3. (course objectives 1, 4, 6, 8, 9, 10 and 11,as well as GE objectives of Cite critical observations, underlying assumptions and limitations to explain and apply important ideas and models in one or more of the following: physical science, life science, mathematics or computer science.
· Recognize evidence-based conclusions and form reasoned opinions about science-related matters of personal, public and ethical concern.)

Assignment 4 final Research Topic Paper: You will use your hypothesis about a nutrient/ nutritional supplement or other consumed substance effect on one aspect of health (it may be identified from assignment 1 and use feedback from assignment 3 plus Turnitin input on originality and grammar) to complete your final research paper with peer reviewed research study references. This MUST be turned into Canvas Turnitin under assignments. Students should submit papers to Turnitin assignments without identifying information included in the paper (e.g. name or student number), the system will automatically show this info to faculty in your course when viewing the submission, but the information will not be retained by Turnitin. Student submissions will be retained in the global Turnitin repository. It is important to use the feedback from Turnitin on originality and grammar to edit, as well as peer feedback and revise your draft research paper for your final research paper. Instructions on the text website or Canvas. You must review several credible references and at least three peer reviewed research studies on your topic and properly cite them for this assignment. Turnitin will provide you with feedback on grammar and similarity which you can use to improve/ edit your paper up until the due date for the final version to be graded as it will be graded based on grammar/ use of English language, ensuring it is your own writing and

words, a proper hypothesis on a nutrient with development of the research and critique of the methods and results found to draw an evidence based conclusion using proper citation to give proper credit to your sources within the paper (meets course objectives 1, 4, 6, 8, 9, 10 and 11,as well as GE objectives of Cite critical observations, underlying assumptions and limitations to explain and apply important ideas and models in one or more of the following: physical science, life science, mathematics or computer science. Recognize evidence-based conclusions and form reasoned opinions about science-related matters of personal, public and ethical concern.)

All above written assignments will require students find and use common information resources and evidence based information, engage in specialized library research to find evidence based studies and information, use computers and seek out appropriate expert opinion and advice to evaluate the evidence, assumptions and limitations of a nutrition and health science topic and form a educated opinion. This requires they learn and apply general understanding of current theory, concepts, knowledge and scientific method pertaining to the nature of the life on this planet. All writing assignments will be evaluated using a department grading rubric to evaluating all criteria.

What steps does the department plan to take to ensure that instructors comply with the respective category criteria and who is responsible?

We have a lead faculty for every course who shares a template syllabus, shares all course materials including for this course powerpoint lectures, developed quizzes, assignments and grading rubrics for all faculty to use.

General Education Details - Area B5: Further Studies in Physical Science, Life Forms and Quantitative Reasoning

Section 1.

Indicate in written statements how the course meets the following criteria for Category B5. Relate the statements to the course syllabus and outline. Be as succinct as possible.

Course type:

Quantitative Reasoning
Physical Science or Life Forms

For courses in physical science or life forms:

Develops an understanding of the principles underlying and interrelating natural phenomena including the foundations of our knowledge of living systems.

This course reviews the principles of the human body from cell to order to entire systems.

Introduces students to one or more of the disciplines whose purpose is to acquire knowledge of the physical universe and/or living systems and life forms.

introduces students to the human living system from a nutrition science perspective.

Develops an appreciation of the methodologies of science and the limitations of scientific inquiry.

Students evaluate nutrition research studies and critique study methods and results on a topic of scientific inquiry.

For courses in quantitative reasoning:

Develops basic mathematical or logical concepts, quantitative reasoning skills, and has general applicability in solving problems.

Students evaluate nutrition research studies and critique study methods and results on a topic of scientific inquiry.

Develops computational skills or competence in the analysis of arguments.

Students evaluate nutrition research studies and critique study methods and results on a topic of scientific inquiry to analyze the topic and reach a conclusion of the arguments for or against the topic of inquiry. .

Please Note: Courses listed in this category:
1) Need not be introductory courses and need not be as broad in scope as courses included in B1, B2, B3 or B4 i.e.; they may deal with a specialized topic.
2) These courses may have prerequisites or build on or apply concepts and knowledge covered in Areas B1, B2 and B4. For math courses, there must be an intermediate algebra prerequisite.

Addresses the specific GE student learning outcomes for area B5. A student should be able to do one or more of the following:

Cite critical observations, underlying assumptions and limitations to explain and apply important ideas and models in one or more of the following: physical science, life science, mathematics, or computer science.

Students evaluate nutrition research studies and critique study methods including critical observations, underlying assumptions and limitations and results on a topic of scientific inquiry to analyze the topic and reach a conclusion of the arguments for or against the topic of inquiry in human nutrition/ life science. .

Recognize evidence-based conclusions and form reasoned opinions about science-related matters of personal, public and ethical concern.

Students evaluate nutrition research studies and critique study methods including critical observations, underlying assumptions and limitations and results on a topic of scientific inquiry to analyze the topic and reach an evidence based conclusion and form reasoned opinions about science related matters about personal and public nutrition concerns.

Discuss historical or philosophical perspectives pertaining to the practice of science or mathematics.

Class reviews and discusses historical perspectives pertaining to the practice of nutrition science.

Includes a writing component described on course syllabus

I) If course is lower division, formal and/or informal writing assignments encouraging students to think through course concepts using at least one of the following: periodic lab reports, exams which include essay questions, periodic formal writing assignments, periodic journals, reading logs, other. Writing in lower division courses need not be graded, but must, at a minimum, be evaluated for clarity and proper handling of terms, phrases, and concepts related to the course.
2) If course is upper division, a minimum of 1500 words of formal, graded writing. [Preferably there should be more than one formal writing assignment and each writing assignment (e.g. periodic lab reports, exams which include essay questions, a research/term paper etc.) should be due in stages throughout the semester to allow the writer to revise after receiving feedback from the instructor. Include an indication of how writing is to be evaluated and entered into course grade determination.]

Students write a diet analysis assignment (min 3 pages). A draft research topic paper (five pages). peer review student research topic papers (students get student, Turnitin and instructor feedback on draft) before submitting a final research topic paper (five pages). In addition students do ten written discussion topics.

Section 2.

If you would like, you may provide further information that might help the G.E. Course Review Committee understand how this course meets these criteria and/or the G.E. Program Objectives found in the CSUS Policy Manual, General Education Program, Section I.B.

Existing course that has already been approved as AREA B5 GE.

Please attach any additional files not requested above:

NUFD 113 Consultations_BIO_HLSC_PUBH.pdf

Reviewer Comments:

Tristan Josephson (tristan.josephson) (Wed, 28 Apr 2021 19:56:18 GMT): Rollback: Please see email for changes requested.

Key: 14016