

CALIFORNIA STATE UNIVERSITY, BAKERSFIELD
ACADEMIC SENATE

Pilot Program for Master of Science in Applied Nutrition

RES 141509

CCC and BPC

RESOLVED: that the Academic Senate recommend the new degree proposal for a Master of Science in Applied Nutrition pilot program to be implemented for fall semester 2016.

RATIONALE: The PEAK Department applied to the CSU Commission on the Extended University and was awarded funding to develop this online 36 semester unit graduate program in Applied Nutrition. The Department proposes a 5 year pilot project that is delivered through Department resources, online technologies, self-support financing, and administered with the assistance of an Advisory Board already established. The proposal is supported by a needs assessment, a review of student interest, and a strategic plan for conversion to state-side funding should the project be successful. The Proposal has been reviewed and approved by the SSE Curriculum Committee, the AS Budget and Planning Committee, and the Curriculum Conversion Committee.

Distribution List:

Approved by the Senate on November 13, 2014
Sent to the President for approval on November 21, 2014
Approved by the President on December 18, 2014

NEW DEGREE PROPOSAL

Proposals to add a new degree must receive appropriate campus and Chancellor Office approval prior to implementation. All attachments are to be added to this cover sheet and remain with the proposal through the required steps of evaluation. Please consult with the Associate Vice President of Academic Programs for questions or assistance.

This proposal is to add a new degree in (title) Applied Nutrition degree code: 08356
effective (term) Fall 2016. (degree codes may be found on the CO website
www.calstate.edu/app/documents/HEGIS-CIP2000_102406.xls)

This new degree proposal is (check one):

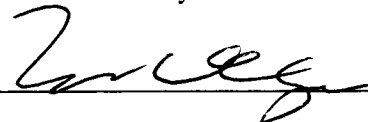
On the Academic Master Plan Fast track proposal Pilot degree program

Originating Department or Individual: Kris Grappendorf

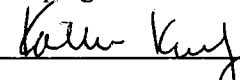
If a department formally approved the attached proposal, attach the appropriate memorandum and approval date.

Signature:  date: 9/22/14

Curriculum Committee(s): Interschool programs should attach comments or approval from relevant school or department curriculum committees before being submitted to the Academic Affairs Committee, acting as the University Curriculum Committee. A memorandum and approval date from the curriculum committee must be attached. If any revisions were required or agreed to, a revised copy of the proposal must be attached.

Chair Signature:  date: 9-22-14

School Dean(s): I have reviewed this proposal and send it forward for university-wide review with my comments attached. These comments include my analysis of the resource commitments that must be made to support the program and the origin(s) of those resources.

Dean Signature:  date: 9-22-14

AVP of Academic Programs: I have reviewed this proposal and send it forward to the Provost.

AVP Signature: _____ date: 10/16/14

Date of Senate Approval: _____ Date of President Approval: _____

Please attach the final Academic Senate Resolution, as signed by the President and return to the Office of Academic Programs, which will notify the Chancellor's Office and the appropriate campus departments. A copy of this form must be sent to the Director of Academic Operations and Support.



CSU Bakersfield

School of Social Sciences and Education

Curriculum Committee

Mail Stop: 24 DDH
9001 Stockdale Highway
Bakersfield, California 93311-1022

MEMORANDUM

DATE: August 14, 2014

TO: Department Chair, Kris Grappendorf

CC: Dr. Kathleen Knutzen, Dean of School of Social Sciences and Education

FROM: Social Sciences Curriculum Committee
Louis Wilman, Advanced Educational Studies
HeeJong Joo, Criminal Justice
Eugene Wang, Physical Education & Kinesiology
Gitika Commuri, Political Science
Rose McCleary, Social Work
Kristina LaGue, Teacher Education
Luis Vega, Psychology
Rhonda Dugan, Sociology

Subject: Master of Science in Applied Nutrition (MSAN) for the Semester System

The Curriculum Committee of the School of Social Sciences and Education has carefully reviewed the submission and revision of the proposal for the Master of Science in Applied Nutrition Pilot Degree to be offered through extended university and that is made possible by a grant from the CSU Chancellor's Office. We have approved (unanimously) your proposal for this Pilot Degree and will now forward your documents to our Dean for final approval.



CSU Bakersfield

Office of the Provost and
Vice President for Academic Affairs

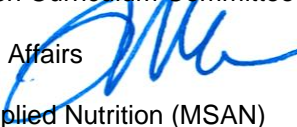
Mail Stop: 59 ADM
9001 Stockdale Highway
Bakersfield, California 93311-1022

(661) 654-2154
(661) 654-2131 FAX
www.csub.edu/provost

Memorandum

DATE: October 17, 2014

TO: Jacquelyn Kegley, Chair, Academic Senate
c: Carl Kemnitz, Associate Vice President, Academic Programs
Kathleen Knutzen, Dean, School of Social Sciences & Education
Kris Grappendorf, Chair, Department of Physical Education and Kinesiology
Luis Vega, Chair, School of Social Sciences & Education Curriculum Committee

FROM: Soraya M. Coley, Provost and Vice President for Academic Affairs 

RE: Pilot Degree Program Proposal for Master of Science in Applied Nutrition (MSAN)

Please find attached the Pilot Degree Program Proposal for Master of Science in Applied Nutrition (MSAN) for review and consideration by the Academic Senate. This proposal has been approved by the Department Chair, School Dean, Curriculum Committee and the Associate Vice President for Academic Programs. I also support this pilot degree program and appreciate the Academic Senate's consideration.

If approved by the Academic Senate, it is my understanding that the program will address the following additional things before being forwarded to the Chancellor's Office:

- Clarify whether all five full-time faculty have terminal degrees (as required by Title 5) and provide CVs for each
- Add a three year course offering schedule (a roadmap is presented in the place where the template asks for this)
- Add the mapping to Graduate University Learning Outcomes
- Work with Extended University Dean Mark Novak to address self-support specific issues such as:
 - specification of how all required EO 1047 criteria are met
 - the proposed program does not replace existing state-support courses or programs
 - explanation of why state funds are either inappropriate or unavailable
 - a cost-recovery program budget is included*
 - student per-unit cost is specified
 - total cost for student to complete the program is specified

Please feel free to contact Chair Kris Grappendorf or Dean Kathleen Knutzen for questions or clarification.



February 20, 2014

CSU Commission on the Extended University
CSU Office of the Chancellor, 6th floor
401 Golden Shore
Long Beach, CA 90802

Dear Members of the Commission,

As the Director of the Kern County Public Health Services Department (KCPHSD), I am in great support of the proposal for the development of the fully online Masters of Science in Applied Nutrition (MSAN) degree program at CSU Bakersfield. We are facing a shortage of health care professionals such as medical doctors, dentist, nurses, and dietitians and the creation of this online program is the first start in addressing the lack of local and statewide Master's level Nutrition Programs.

Kern County faces many health related obstacles, which are linked to the growing obesity epidemic. I am excited to work with our partner, CSU Bakersfield to address Food Security, Community Nutrition, and Chronic Disease management. In 2009, KCPHSD began developing its comprehensive "Call to Action: Chronic Disease and Obesity Plan". This multisectorial plan involves many of our partners working to improve the overall health of Kern County. Kern County ranks highest of the 58 California counties in deaths from heart disease and is second highest in deaths from diabetes. Poor nutrition and lack of physical activity significantly increases the risk and acuity of diabetes, heart disease, high blood pressure, and cancers. MSAN graduates will have the ability to identify health related problems, create interventions, and develop solutions that create lasting changes. Therefore, CSU Bakersfield's pursuit of the MSAN could not be more timely or necessary.

This 36-unit fully online Master's program will allow working professionals to complete a high-quality nutrition program in two-years. The program will provide students with practical applied approaches in nutrition, as well as promote and manage wellness. I look forward to having my staff join the Nutrition Advisory Council to assist with program development.

Thank you for your consideration of the Master of Science in Applied Nutrition proposal. With a growing demand for high-level nutrition experts, I strongly believe this program will be successful and have a long-term impact at the local and state level.

Sincerely,

Matthew Constantine, Director
Public Health Services Department

February 15, 2014

CSU Commission on the Extended University
CSU Office of the Chancellor, 6th floor
401 Goldern Shore
Long, Beach, CA 90802

Dear Members of the Commission,

As a Registered Dietitian, Professor of Nutrition at Bakersfield College and Program Manager at Bakersfield Memorial Hospital, I am pleased to support the proposal for the development of the fully online Masters of Science in Applied Nutrition (MSAN) degree program at CSU Bakersfield. The project addresses the lack of local and statewide Master's level Nutrition Programs.

Locally, Kern County faces many health related obstacles. Kern County ranks highest of the 58 California counties in deaths from heart disease and is second highest in deaths from diabetes. Poor nutrition and lack of physical activity significantly increase the risk and acuity of diabetes, heart disease, high blood pressure and many cancers. These conditions closely follow low-income and minority populations, which are extremely prevalent in Central California. Interventions addressing these issues and objectives targeting prevention are most likely beneficial when professionals are able to relate to their population. Having a program to educate and advocate for better nutrition in the locations where it is needed most provides an advantage in obtaining risk reduction outcomes.

MSAN graduates will have the ability to identify health related problems, create interventions, and develop solutions that create lasting changes. I am eager to work with CSU Bakersfield to address Food Security, Community Nutrition, and Chronic Disease management.

This 36-unit fully online Master's program will allow working professionals to complete a high-quality nutrition program in two-years. The program will provide students with practical applied approaches in nutrition, as well promoting and managing wellness. I look forward to joining the Nutrition Advisory Council to assist with program development.

Thank you for your consideration of the Master of Science in Applied Nutrition proposal. With a growing demand for high-level nutrition experts, I strongly believe this program will be successful and have a long-term impact at the local and state level.

Sincerely,



Laurie Wallace, MS, RD, CDE

1. Program Type (Please specify any from the list below that apply—delete the others)

√ [Pilot](#)

2. Program Identification

- a. *Campus*
- Bakersfield
- b. *Full and exact degree designation and title (e.g. Master of Science in Genetic Counseling, Bachelor of Arts with a Major in History).*
– Master of Science in Applied Nutrition (MSAN)
- c. *Date the Board of Trustees approved adding this program projection to the campus Academic Plan.*
- Pilot Program Fall 2016
- d. *Term and academic year of intended implementation (e.g. Fall 2012).* – Fall 2016
- e. *Total number of units required for graduation. This will include all requirements, not just major requirements.* – 36 Semester Credit Hours
- f. *Name of the department(s), division, or other unit of the campus that would offer the proposed degree major program. Please identify the unit that will have primary responsibility.* –Department of Kinesiology
- g. *Name, title, and rank of the individual(s) primarily responsible for drafting the proposed degree major program.* – Kris Grappendorf, Chair, Kinesiology
- h. *Statement from the appropriate campus administrative authority that the addition of this program supports the campus mission and will not impede the successful operation and growth of existing academic programs. (CPEC “Appropriateness to Institutional and Segmental Mission”)* –**PLEASE SEE ATTACHED LETTER FROM DEAN & PRESIDENT**
- i. *Any other campus approval documents that may apply (e.g. curriculum committee approvals).* – **PLEASE SEE CURRICULUM COMMITTEE APPROVAL LETTER**
- j. *Please specify whether this proposed program is subject to WASC Substantive Change review. The campus is required to either attach a copy of the WASC Sub-Change proposal or submit that document in lieu of the CSU proposal format.*
- The Department of Kinesiology and School of Social Sciences & Education will apply upon senate approval.
- k. *Optional: Proposed Classification of Instructional Programs (CIP) Code and CSU Degree Program Code* – 01.0101 (CIP Code) and 01121 (CSU Program Code)

CSU Degree Code: 08356 Exercise Physiology+Nutrition
CIP Code: 31.0599

3. Program Overview and Rationale

- a. Rationale, including a brief description of the program, its purpose and strengths, fit with institutional mission, and a justification for offering the program at this time. The rationale may explain the relationship among the program philosophy, design, target population, and any distinctive pedagogical methods. (CPEC “**Appropriateness to Institutional and Segmental Mission**”)

CSU Bakersfield proposes a Master of Science in Applied Nutrition (MSAN) fully on-line program designed to address the demand for nutrition experts. The Master of Science in Applied Nutrition (MSAN) will be offered in partnership with Department of Kinesiology and Extended University. The MSAN will prepare students to gain competency in the areas of dietetics & nutrition, community nutrition, nutrition & exercise science, chronic disease management, and food security/safety.

The project is self-support model, which incorporates distance-learning technologies by offering a fully online 36-semester unit graduate program with integrated industry created video modules and culminating community-based project. The MSAN degree advances CSU Bakersfield’s mission to increase the region’s overall educational attainment, enhance its quality of life, and support its economic development. The MSAN will prepare highly-qualified nutrition experts; increasing access to educational opportunities by serving broader constituencies through an innovative online delivery; and by creatively developing a new program.

There is a tremendous local, state, and national need for an online Master of Science in Applied Nutrition. According to the State of California’s Employment Development Department, “Dietitians with specialized training, an advanced degree, or certifications will experience the best job opportunities.” The MSAN is an advanced degree that will provide students with skills needed in the field of nutrition. In California the number of Dietitians and Nutritionists is expected to increase by 20%, or 1,400 jobs between 2010 and 2020. Expected growth in employment is high and to meet the demand, the MSAN online program will provide a pipeline of qualified nutrition experts as well as create a positive long-term societal impact on health and wellness.

The California State University system does not offer a fully online Master of Science in Applied Nutrition or any other online Master’s related nutrition degree. The program will attract a wide range of students from a variety of disciplines including but not limited to Kinesiology, Human Biology, Chemistry and Pre-Nursing. Having a fully online graduate degree will allow individuals already working or outside of the area the ability to gain mastery of content, as well as communicate with peers (locally, statewide, and nationally).

There is a tremendous local, state, and national need for an online Master of Science in Applied Nutrition. CSU Bakersfield is located in California’s Central Valley in Kern County. According to the Center for Disease Control, “The health of Kern County residents has become an alarming concern. Chronic disease, along with the issues of overweight and obesity, has reached epidemic proportions in Kern County. Over 60% of the population (teens and adults) is reported as being overweight or obese. Kern County ranks highest of the 58 California counties in deaths from heart disease and is second highest in deaths from diabetes. Kern County also ranked in the bottom 25% for six of eight health indicators related to all causes of death (2010). Poor nutrition and lack of physical activity significantly increases the risk and acuity of diabetes, heart disease, high blood pressure and cancers.” These conditions closely follow low-income and minority populations, which are extremely prevalent in Central California. Interventions addressing these issues and objectives targeting prevention are most likely beneficial when professionals are able to relate to their population. Having a program to educate and advocate for better nutrition in the locations where it is needed most provides an advantage in obtaining risk reduction outcomes.

- b. Proposed catalog description, including program description, degree requirements, and admission requirements. For master's degrees, please also include catalog copy describing the culminating experience requirement(s).

Program Description: The Department of Kinesiology offers a Master's of Science degree in Applied Nutrition (MSAN). The MSAN is a fully online program. The MSAN will provide students with a breadth of knowledge in nutrition including an emphasis in community nutrition, nutrition and exercise sciences, and chronic disease education & food security. Students will gain experience evaluating individual needs, developing nutritional care plans, and educating individuals and their families. The program will require students to complete a community nutrition project that will provide students with a practical experimental learning opportunity.

Degree requirements: *Prerequisites:* Coursework in human anatomy, human physiology, human nutrition and introductory chemistry that includes organic, inorganic and biochemistry OR AP chemistry.

Program Requirements for the MSAN include 36 units:

1-Required Coursework (18 units): KINE 6010, 6020, 6030, 6040, 6050, 6060

2-Required Clinical Practicum (3 units): KINE 6170

3-Special Topics (9 units): KINE 6700-6790

4-Culminating Experience (6 units): KINE 6800

Course Descriptions:

KINE 6010- Food and Society (3)

This course examines food choices made in contemporary society where obesity and chronic disease are on the rise while government and the food industries continue to encourage the population to eat and drink more. Topics to include global trends, food policy and marketing, food insecurity and dietary supplements.

KINE 6020- Needs Assessment and Program Planning (3)

This course introduces you to the development, planning, and administration of evidence-based programs that are relevant for applied nutrition practice; and the evaluation and needs assessment of both existing and new programs. The overall goal of this course is for you to develop concrete program development and evaluation skills; to learn to work successfully to complete a project; to develop a program and program evaluation proposal; and, to succinctly convey your ideas and findings in writing.

KINE 6030- Health Promotion and Disease Prevention (3)

The purpose of this course is to provide an overview of the major issues in health promotion and disease prevention with a focus on areas relevant to applied nutrition research and practice. Students will be introduced to the major causes of premature mortality and morbidity and the behavioral and environmental contributions to illness and injury. As will be noted most of the major causes of death are related to nutrition. Strategies for risk reduction and the development and implementation of interventions will be presented. Emphasis will be placed on understanding the economic, political, and ethical considerations that may impact the implementation and effectiveness of interventions.

KINE 6040- Applied Research Methods (3)

This course provides the student with basic knowledge about the design and analysis of applied nutrition research and health behavior and promotion. The theory, design, applications, and analytic strategies used for various types of research are presented in a sequential format. Goals of the course include 1) gaining the ability to critically evaluate applied nutrition research in health behavior, 2) achieving competence in research methodology, and 3) understanding the conceptual application of analytic techniques to data.

KINE 6050- Foundations of Nutrition Leadership (3)

This course provides an overview of the leadership skills needed to succeed in the fields of clinical and community nutrition. During this course, students build skills in identifying, strategizing, and implementing change for the improvement of the nutritional status of an individual, community or culture, or the success of a nutrition program. Students will learn increase their proficiency in critical thinking, interdisciplinary team building, cultural competency and awareness, public policy and advocacy.

KINE 6060- Advanced Nutrition in Health and Disease (3)

This course examines the function of essential nutrients in human metabolism and their role in health and wellness and contemporary medical management and prevention of chronic disease. Emphasized is nutrition in integrated biologic systems, nutritional assessment through the life cycle, nutrition in various clinical disorders, genetics as it applies to nutrition and areas of major scientific progress relating nutrition to disease.

KINE 6170- Clinical Practicum (3)

This course consists of a supervised practicum experience within a university program, community agency, business, or industry for the purpose of acquiring additional knowledge and skills desirable for professional development in the nutrition field. Specific competencies for the site will be evaluated by a site supervisor in collaboration with a faculty mentor. To be completed near the end of the program. Instructor approval required.

KINE 6700- Special Topics (3)

Special topics course in contemporary issues and issues of current interest. May be repeated for up to 9 units toward degree. When offered, prerequisites and course requirements will be announced with each course.

KINE 6710- Nutrition and Physical Activity (3)

This course is a study of the impact of nutritional factors on human physiological responses and adaptations to acute and chronic exercise. Emphasis is placed on application of relevant information; such as utilization of current research to provide general nutritional guidance as well as develop specific meal plans for persons interested in improving recreational and competitive performance.

KINE 6720- Health Behavior Change (3)

This course will provide an overview of social and behavioral science theories that are currently used to: 1) understand health related behaviors; and 2) guide development of interventions designed to prevent, reduce or eliminate major public health problems with respect to health behavior. Students will produce a "Theory Application Paper" in which they will select a theory or theories used to change a health behavior and will provide an overview and critique of that research. The assignment is a good opportunity for students to expand their knowledge of a topic of interest. Students are encouraged to select a nutrition-focused topic.

KINE 6730- Medical Nutrition Therapy (3)

This course, in a case study approach, explores the clinical and therapeutic application of diet and specific nutrients in the management and treatment of common illnesses in individuals, rather than population groups. Dietary modification, nutrient restriction/fortification, and lifestyle strategies are reviewed and practiced to correct and promote optimal health and healing, and reduce risks of malnutrition and poor clinical outcomes. Nutritional assessment, diagnosis and care planning is demonstrated and practiced. Evaluation of interventions and problem solving for barriers to treatment are experienced.

KINE 6800- Culminating Experience (6)

This course provides an opportunity for students to apply nutrition concepts and planning competencies to a project within a university, community, regional, or national setting. Students research and refine a problem proposed or approved by the organization; develop an explicit working agreement governing the scope and deliverables of the project; collect data and/or conduct analyses relevant to the project; and prepare a final report or manuscript in written and oral form.

Admission Requirements: In addition to prerequisite coursework requirements, applicants must meet the following admission requirements:

- Bachelor's Degree from an accredited four-year college or university
- Cumulative GPA of 3.0 in the last 90 units of all coursework.
- Three Reference Forms
- Personal Statement
- Completed CSUB Extended University Application
- One official transcript from each college attended.

4. Curriculum

- a. Goals for the (1) program and (2) [student learning outcomes](#). Program goals are very broad statements about what the program is intended to achieve, including what kinds of graduates will be produced. Student learning outcomes are more specific statements that are related to the program goals but that more narrowly identify what students will know and be able to do upon successful completion of the program.

MSAN Curriculum/Assessment Map**Department Goals and Student Learning Outcomes (SLOs)**

- 1. Scientific Foundations of Kinesiology**
 - a. Demonstrate knowledge of the biological and physical processes that inform our understanding of physical activity, nutrition and health.
- 2. Cultural, Historical, Philosophical Foundations in Kinesiology**
 - a. Describe sociocultural and historical factors that influence individual and community physical activity and nutritional health outcomes among a diverse population.
- 3. Practice and Application of Kinesiology**
 - a. Demonstrate the ability to participate in, plan, lead, and implement physical activity and nutrition programs for the development of healthy behaviors and improved quality of life.

4. Analysis and Critical Thinking in Kinesiology

- a. Understand and utilize qualitative and quantitative processes for human performance and health assessment.

5. Professional Development

- a. Demonstrate a commitment to the development of professional dispositions such as ethical behavior and collaboration as well as engagement in community and professional organizations.
- b. Plans for assessing program goals and student learning outcomes. Some planners find it helpful to develop matrices in which student learning outcomes and required courses are mapped, indicating where content related to the learning outcomes is introduced, reinforced, and practiced at an advanced level in required courses. (CPEC “Maintenance and Improvement of Quality”

I = Introduced D=Developed C=Competent M=Mastery

Demonstrated

Course #	Course name	SLO 1	SLO 2	SLO 3	SLO 4	SLO 5
KINE 6010	Food and Society	C	C			
KINE 6020	Needs Assessment and Program Planning		D	D		M
KINE 6030	Health Promotion and Disease Prevention	I	D	C	D	D
KINE 6040	Applied Health Research Methods	I	I	I	D	D
KINE 6050	Foundations of Leadership in Nutrition	C	C	D	M	
KINE 6060	Advanced Nutrition in Health and Disease	D	D	C		
KINE 6170	Clinical Practicum			M		M
KINE 6710	Nutrition and Physical Activity	C		C	D	D
KINE 6720	Health Behavior Change	C	C	M	C	M
KINE 6730	Medical Nutrition Therapy	C	C			
KINE 6800	Culminating Experience	M	M	M	M	M

- c. Total number of units required for graduation.
36 semester units
- d. Include a justification for any baccalaureate program that requires more than 120-semester units or 180-quarter units.-N/A

- e. If any formal options, concentrations, or special emphases are planned under the proposed major, identify and explain fully. Optional: You may propose a CSU degree program code and CIP code for each concentration that you would like to report separately from the major program, if the option is approximately equivalent to a degree currently listed on the CSU application-booklet degree program table. If you do not find an appropriate CSU degree program code at: http://www.calstate.edu/app/documents/HEGIS-CIP2000_102406.xls , you can search CIP 2000 at <http://nces.ed.gov/pubs2002/cip2000/> to help identify the code that best matches the proposed curriculum. –Special Topics courses will be taught–CSU Degree Code: 08356 Exercise Physiology+Nutrition CIP Code: 31.0599
- f. A list of all courses *required* for the major, specifying catalog number, *title*, units of credit, and prerequisites or co-requisites (ensuring that there are no “hidden” prerequisites that would drive the total units required to graduate beyond the total reported in 4c above). Include proposed catalog descriptions of all new courses.

Prerequisites:

- Human Anatomy
- Human Physiology
- Chemistry (Introductory chemistry that includes organic, inorganic, biochemistry **OR** AP Chem)
- Human Nutrition

Course #	Course	Units
KINE 6010	Food and Society	3
KINE 6020	Needs Assessment and Program Planning	3
KINE 6030	Health Promotion and Disease Prevention	3
KINE 6040	Applied Health Research Methods	3
KINE 6050	Foundations of Leadership in Nutrition	3
KINE 6060	Advanced Nutrition in Health and Disease	3
KINE 6170	Clinical Practicum	3
KINE 6700-6790	Special Topics	9
KINE 6800	Culminating Experience	6
	TOTAL	36

*NOTE: 6010, 6020, 6030, 6040, 6050 and 6060 are prerequisite to 6800.

Course #	Special Topics Courses	Units
KINE 6710	Nutrition and Physical Activity	3
KINE 6720	Health Behavior Change	3
KINE 6730	Medical Nutrition Therapy	3

Course Description:**KINE 6010- Food and Society (3)**

This course examines food choices made in contemporary society where obesity and chronic disease are on the rise while government and the food industries continue to encourage the population to eat and drink more. Topics to include global trends, food policy and marketing, food insecurity and dietary supplements.

KINE 6020- Needs Assessment and Program Planning (3)

This course introduces you to the development, planning, and administration of evidence-based programs that are relevant for applied nutrition practice; and the evaluation and needs assessment of both existing and new programs. The overall goal of this course is for you to develop concrete program development and evaluation skills; to learn to work successfully to complete a project; to develop a program and program evaluation proposal; and, to succinctly convey your ideas and findings in writing.

KINE 6030- Health Promotion and Disease Prevention (3)

The purpose of this course is to provide an overview of the major issues in health promotion and disease prevention with a focus on areas relevant to applied nutrition research and practice. Students will be introduced to the major causes of premature mortality and morbidity and the behavioral and environmental contributions to illness and injury. As will be noted most of the major causes of death are related to nutrition. Strategies for risk reduction and the development and implementation of interventions will be presented. Emphasis will be placed on understanding the economic, political, and ethical considerations that may impact the implementation and effectiveness of interventions.

KINE 6040- Applied Research Methods (3)

This course provides the student with basic knowledge about the design and analysis of applied nutrition research and health behavior and promotion. The theory, design, applications, and analytic strategies used for various types of research are presented in a sequential format. Goals of the course include 1) gaining the ability to critically evaluate applied nutrition research in health behavior, 2) achieving competence in research methodology, and 3) understanding the conceptual application of analytic techniques to data.

KINE 6050- Foundations of Nutrition Leadership (3)

This course provides an overview of the leadership skills needed to succeed in the fields of clinical and community nutrition. During this course, students build skills in identifying, strategizing, and implementing change for the improvement of the nutritional status of an individual, community or culture, or the success of a nutrition program. Students will learn increase their proficiency in critical thinking, interdisciplinary team building, cultural competency and awareness, public policy and advocacy.

KINE 6060- Advanced Nutrition in Health and Disease (3)

This course examines the function of essential nutrients in human metabolism and their role in health and wellness and contemporary medical management and prevention of chronic disease. Emphasized is nutrition in integrated biologic systems, nutritional assessment through the life cycle, nutrition in various clinical disorders, genetics as it applies to nutrition and areas of major scientific progress relating nutrition to disease.

KINE 6170- Clinical Practicum (3)

This course consists of a supervised practicum experience within a university program, community agency, business, or industry for the purpose of acquiring additional knowledge and skills desirable for professional development in the nutrition field. Specific competencies for the site will be evaluated by a site supervisor in collaboration with a faculty mentor. To be completed near the end of the program. Instructor approval required.

KINE 6700- Special Topics (3)

Special topics course in contemporary issues and issues of current interest. May be repeated for up to 9 units toward degree. When offered, prerequisites and course requirements will be announced with each course.

KINE 6710- Nutrition and Physical Activity (3)

This course is a study of the impact of nutritional factors on human physiological responses and adaptations to acute and chronic exercise. Emphasis is placed on application of relevant information; such as utilization of current research to provide general nutritional guidance as well as develop specific meal plans for persons interested in improving recreational and competitive performance.

KINE 6720- Health Behavior Change (3)

This course will provide an overview of social and behavioral science theories that are currently used to: 1) understand health related behaviors; and 2) guide development of interventions designed to prevent, reduce or eliminate major public health problems with respect to health behavior. Students will produce a "Theory Application Paper" in which they will select a theory or theories used to change a health behavior and will provide an overview and critique of that research. The assignment is a good opportunity for students to expand their knowledge of a topic of interest. Students are encouraged to select a nutrition-focused topic.

KINE 6730- Medical Nutrition Therapy (3)

This course, in a case study approach, explores the clinical and therapeutic application of diet and specific nutrients in the management and treatment of common illnesses in individuals, rather than population groups. Dietary modification, nutrient restriction/fortification, and lifestyle strategies are reviewed and practiced to correct and promote optimal health and healing, and reduce risks of malnutrition and poor clinical outcomes. Nutritional assessment, diagnosis and care planning is demonstrated and practiced. Evaluation of interventions and problem solving for barriers to treatment are experienced.

KINE 6800- Culminating Experience (6)

This course provides an opportunity for students to apply nutrition concepts and planning competencies to a project within a university, community, regional, or national setting. Students research and refine a problem proposed or approved by the organization; develop an explicit working agreement governing the scope and deliverables of the project; collect data and/or conduct analyses relevant to the project; and prepare a final report or manuscript in written and oral form.

- g. List of *elective* courses that can be used to satisfy requirements for the major, specifying catalog number, title, units of credit, and prerequisites or co-requisites. Include proposed catalog descriptions of all new courses. For graduate program proposals, identify whether each course is a graduate or undergraduate offering.

Course #	Special Topics Courses (graduate)	Units
KINE 6710	Nutrition and Physical Activity	3
KINE 6720	Health Behavior Change	3
KINE 6730	Medical Nutrition Therapy	3

Special Topics course description:

KINE 6700- Special Topics (3)

Special topics course in contemporary issues and issues of current interest. May be repeated for up to 9 units toward degree. When offered, prerequisites and course requirements will be announced with each course.

KINE 6710- Nutrition and Physical Activity (3)

This course is a study of the impact of nutritional factors on human physiological responses and adaptations to acute and chronic exercise. Emphasis is placed on application of relevant information; such as utilization of current research to provide general nutritional guidance as well as develop specific meal plans for persons interested in improving recreational and competitive performance.

KINE 6720- Health Behavior Change (3)

This course will provide an overview of social and behavioral science theories that are currently used to: 1) understand health related behaviors; and 2) guide development of interventions designed to prevent, reduce or eliminate major public health problems with respect to health behavior. Students will produce a “Theory Application Paper” in which they will select a theory or theories used to change a health behavior and will provide an overview and critique of that research. The assignment is a good opportunity for students to expand their knowledge of a topic of interest. Students are encouraged to select a nutrition-focused topic.

KINE 6730- Medical Nutrition Therapy (3)

This course, in a case study approach, explores the clinical and therapeutic application of diet and specific nutrients in the management and treatment of common illnesses in individuals, rather than population groups. Dietary modification, nutrient restriction/fortification, and lifestyle strategies are reviewed and practiced to correct and promote optimal health and healing, and reduce risks of malnutrition and poor clinical outcomes. Nutritional assessment, diagnosis and care planning is demonstrated and practiced. Evaluation of interventions and problem solving for barriers to treatment are experienced.

- h. List of any new courses that are: (1) needed to initiate the program and (2) needed during the first two years after implementation. Only include proposed catalog descriptions for new courses. For graduate program proposals, identify whether each course is a graduate-level or undergraduate-level offering.
All courses in the MSAN will be new graduate level courses. Please see course descriptions in f. & g
- i. Attach a proposed course-offering plan for the first three years of program implementation, indicating, where possible, likely faculty teaching assignments.

SAMPLE: 1 year/3 semester road map

Semester 1	Semester 2	Semester 3	Faculty Teaching Assignment
KINE 6010 (3)	KINE 6040 (3)	*KINE 6170 (3)	TBD
KINE 6020 (3)	KINE 6050 (3)	*KINE 6800 (6)	TBD
KINE 6030 (3)	KINE 6060 (3)	KINE 6730 (3)	TBD
KINE 6710 (3)	KINE 6720 (3)		TBD
12 units	12 units	12 units	

* Must be completed in final semester

SAMPLE: 2 year course schedule

Semester 1	Semester 2	Semester 3	Faculty Teaching Assignment
KINE 6010 (3)	KINE 6040 (3)	KINE 6730 (3)	TBD
KINE 6020 (3)	KINE 6050 (3)	KINE 6720 (3)	TBD
Semester 4	Semester 5	Semester 6	
KINE 6030 (3)	KINE 6060 (3)	*KINE 6800 (6)	TBD
KINE 6710 (3)	KINE 6170 (3)		TBD

* Must be completed in final semester

- j. For master's degree proposals, include evidence that program requirements conform to the minimum requirements for the culminating experience, as specified in [Section 40510](#) of [Title 5 of the California Code of Regulations](#).
The MSAN program meets Section 40510 of Title 5 of the California Code of Regulations requirements. As evident by the following:
- Meets minimum semester units of approved graduate work completed within a maximum time (36 units)
 - Not more than six semester units for the culminating or thesis. The KINE 6800 Culminating Experience is 6 semester units.
 - A project is a significant undertaking appropriate to professional field. It evidences originality and independent thinking, appropriate form and organization, and a rationale. **KINE 6800 Culminating Experience** (6) This course provides an opportunity for students to apply nutrition concepts and

planning competencies to a project within a university, community, regional, or national setting. Students research and refine a problem proposed or approved by the organization; develop an explicit working agreement governing the scope and deliverables of the project; collect data and/or conduct analyses relevant to the project; and prepare a final report or manuscript in written and oral form

- A grade point average of 3.0 (grade of B) or better in all courses taken to satisfy the requirements for the degree.
- k. For master's degree proposals, cite the corresponding bachelor's program and specify whether it is (a) subject to accreditation and (b) currently accredited. Possible corresponding bachelor's programs include (all are accredited): Kinesiology, Sciences, Liberal Studies & Nursing.
- l. Admission criteria, including prerequisite coursework.

Degree requirements

Prerequisites:

Applicants must have completed a college/university level course in the following 4 content areas:

1. human anatomy
2. human physiology
3. human nutrition
4. introductory chemistry that includes organic, inorganic and biochemistry **OR AP chemistry**

Admission Requirements:

- Transcripts verifying completion of prerequisite coursework
- Bachelor's Degree from an accredited four-year college or university
- Cumulative GPA of 3.0 in the last 90 units of all coursework
- Three Reference Forms
- Personal Statement
- Completed CSUB Extended University Application
- One official transcript from each college attended

Program Requirements for the MSAN include 36 units:

- 1-Required Coursework (18 units): KINE 6010, 6020, 6030, 6040, 6050, 6060
- 2-Required Clinical Practicum (3 units): KINE 6170
- 3-Special Topics (9 units): KINE 6700-6790
- 4-Culminating Experience (6 units): KINE 6800

- m. Criteria for student continuation in the program- Maintain an overall 3.0 GPA.
- n. For undergraduate programs, planned provisions for articulation of the proposed major with community college programs.-N/A

- o. If there is a [Lower-Division Transfer Pattern](http://www.calstate.edu/AcadAff/ldtp.shtml) (LDTP) for this major, indicate the relationship between the LDTP and the requirements presented in this proposal. Information on LDTP is available at: <http://www.calstate.edu/AcadAff/ldtp.shtml>
N/A
- p. Advising “roadmaps” that have been developed for the major.

SAMPLE: 1 year/3 semester road map

Semester 1	Semester 2	Semester 3
KINE 6010 (3)	KINE 6040 (3)	*KINE 6170 (3)
KINE 6020 (3)	KINE 6050 (3)	*KINE 6800 (6)
KINE 6030 (3)	KINE 6060 (3)	KINE 6730 (3)
KINE 6710 (3)	KINE 6720 (3)	
12 units	12 units	12 units

* Must be completed in final semester

SAMPLE: 2 year course schedule

Semester 1	Semester 2	Semester 3
KINE 6010 (3)	KINE 6040 (3)	KINE 6730 (3)
KINE 6020 (3)	KINE 6050 (3)	KINE 6720 (3)
Semester 4	Semester 5	Semester 6
KINE 6030 (3)	KINE 6060 (3)	*KINE 6800 (6)
KINE 6710 (3)	KINE 6170 (3)	

* Must be completed in final semester

- q. Provision for meeting accreditation requirements, if applicable, and anticipated date of accreditation request (including the WASC Substantive Change process). Anticipated date of WASC Substantive Change will take place upon senate approval.

Accreditation Note:

Master's degree program proposals

If subject to accreditation, establishment of a master's degree program should be preceded by national professional accreditation of the corresponding bachelor's degree major program. –Not subject to national professional accreditation.

Fast-track proposals

Fast-track proposals cannot be subject to specialized accreditation by an agency that is a member of the Association of Specialized and Professional Accreditors unless the proposed program is already offered as an authorized option or concentration that is accredited by an appropriate specialized accrediting agency.

5. Need for the Proposed Degree Major Program (CPEC “Societal Need,” “Number of Existing Programs in the Field,” and “Advancement of the Field”)

- a. List of other California State University campuses currently offering or projecting the proposed degree major program. No other CSU offers a Master of Science in Applied Nutrition (MSAN) fully online. The following CSU’s offer a Master’s program in Nutrition :
 - CSU Chico- Nutrition & Food Science, Nutritional Science
 - San Jose- Nutritional Science
 - San Diego- Nutritional Sciences
 - Long Beach- Nutritional Science
- b. Differences between the proposed program and programs listed in Section 5a above. The MSAN program will be fully-online degree program. The California State University system does not offer a fully online Master of Science in Applied Nutrition or any other online Master’s related nutrition degree. The program will attract a wide range of students from a variety of disciplines including but not limited to Kinesiology, Human Biology, Chemistry and Pre-Nursing. Having a fully online graduate degree will allow individuals already working or outside of the area the ability to gain mastery of content, as well as communicate with peers (locally, statewide, and nationally).
- c. List of other curricula currently offered by the campus that are closely related to the proposed program. Related courses include:
 - PEAK 397 Advanced Nutrient Utilization for Sport and Human Performance (5)
 - BIOL 270 Principles of Nutrition (3)
- d. Community participation, if any, in the planning process. This may include prospective employers of graduates. Please see letters of support from the Kern County Health Department & Registered Dietician Laurie Wallace. An advisory board of interdisciplinary faculty, industry leaders, and program faculty will facilitate and support the planning process. Advisory board members include: PEAK Department faculty, Dr. Todd McBride (Biology), Laurie Wallace, RD, Dr. Avtar Nijjer-Sidhu, and two vacant seats for additional industry leaders.
- e. If the program was proposed to meet society’s need for the advancement of knowledge, please specify the need and explain how the program meets that need.

The California State University system does not offer a fully online Master of Science in Applied Nutrition or any other online Master’s related nutrition degree. The program will attract a wide range of students from a variety of disciplines including but not limited to Kinesiology, Human Biology, Chemistry and Pre-Nursing. Having a fully online graduate degree will allow individuals already working or outside of the area the ability to gain mastery of content, as well as communicate with peers (locally, statewide, and nationally).

Offering an online Master of Science in Applied Nutrition online will help meet the local, state, and national need for an online Master of Science in Applied Nutrition.

According to the State of California’s Employment Development Department, “Dietitians with specialized training, an advanced degree, or certifications will experience the best job opportunities.” The MSAN is an advanced degree that will provide students with skills needed in the field of nutrition. In California the number of Dietitians and Nutritionists is expected to increase by 20%, or 1,400 jobs between 2010 and 2020. Expected growth in employment is high and to meet the demand, CSU Bakersfield proposes an MSAN online program, which will provide a pipeline of qualified nutrition experts as well as create a positive long-term societal impact on health and wellness.

f. Applicable workforce demand projections and other relevant data.

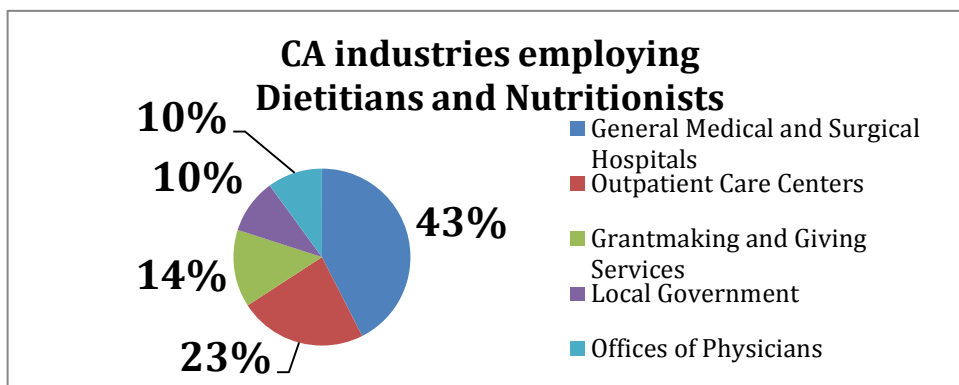
According to the State of California’s Employment Development Department, “Dietitians with specialized training, an advanced degree, or certifications will experience the best job opportunities.” The MSAN is an advanced degree that will provide students not only a solid content knowledge base but skills such as nutritional counseling and outreach program development needed in field of nutrition. In California, the number of Dietitians and Nutritionists is expected to increase by 20%, or 1,400 jobs between 2010 and 2020.

Table 1 Estimated Employment & Projected Growth

Geographic Area (Estimated Year-Projected Year)	Estimated Employment	Projected Employment	Numeric Change	% Change	Additional Openings Due to Net Replacements
California (2010-2020)	7,000	8,400	1,400	20.0	2,500

Source: EDD/LMID Projections of Employment by Occupation at www.labormarketinfo.edd.ca.gov/?PageID=1011

The national employment of dietitians and nutritionists is projected to grow 21% from 2012 to 2022, faster than the average for all occupations. According to the Department of Labor, “The role of food in preventing and treating illnesses, such as diabetes, is now well known. More dietitians and nutritionists will be needed to provide care for patients with various medical conditions and to advise people who want to improve their overall health.”



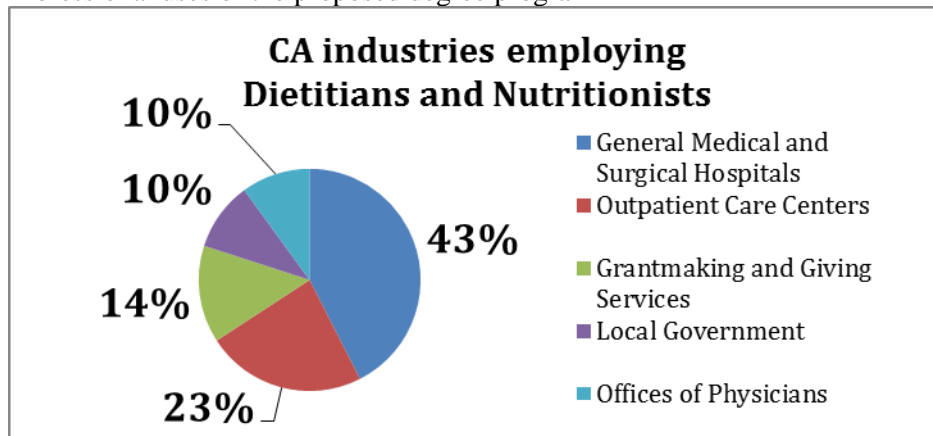
The MSAN will provide a community based nutrition focus that will prepare students to work with individuals and groups on nutritional practices designed to prevent disease and promote health. Students will have employment opportunities in the public sector, including health and hospital settings.

Students will gain experience evaluating individual needs, developing nutritional care plans, and educating individuals and their families. The program will provide students with a breadth of knowledge in nutrition including an emphasis in: community nutrition, nutrition and exercise science, and chronic disease education & food security. The program will require students to complete a community nutrition project that will provide students with a practical experiential learning opportunity. For their culminating experience, students will complete a community nutrition project in their community. Courses in the program will gradually provide them with the knowledge needed to complete the community nutrition project.

6. Student Demand

- a. Compelling evidence of student interest in enrolling in the proposed program. Types of evidence vary and may include national, statewide, and professional employment forecasts and surveys; petitions; lists of related associate degree programs at feeder community colleges; reports from community college transfer centers; and enrollments from feeder baccalaureate programs, for example.
Evidence: A needs assessment meeting with faculty from the School of Social Sciences & Education with local health and nutrition stakeholders examined the potential to address the dire local health situation. From this meeting stakeholders recommended a Master's program that emphasized community nutrition and chronic disease education. The MSAN has been developed with input from local stakeholders, faculty and student demand.
- b. Issues of diversity and access to the university considered when planning this program. The MSAN is an online program that will increase access for students interested in pursuing an advanced degree but are unable to complete a traditional face-to-face program. The MSAN allows students with remote access the opportunity to complete a Master's in Applied Nutrition. The Kinesiology Department adheres to CSUB's policy regarding discrimination and access. The Kinesiology Department will ensure that all web materials are ADA compliant.
- c. For master's degree proposals, the number of declared undergraduate majors and the degree production over the preceding three years for the corresponding baccalaureate program, if there is one. There is no direct corresponding baccalaureate program. The MSAN program will attract majors from Kinesiology, Sciences, Nursing and Liberal Studies nearly 400 graduates each year.

d. Professional uses of the proposed degree program



The MSAN will provide a community based nutrition focus that will prepare students to work with individuals and groups on nutritional practices designed to prevent disease and promote health. Students will have employment opportunities in the public sector, including health and hospital settings.

- e. The expected number of majors in the year of initiation and three years and five years thereafter. The first year of program we expect 20 majors and 30-40 majors each year thereafter.

7. Existing Support Resources for the Proposed Degree Major Program (CPEC “Total Costs of the Program”)

Note: Sections 7 and 8 should be prepared in consultation with the campus administrators responsible for faculty staffing and instructional facilities allocation and planning. A statement from the responsible administrator(s) should be attached to the proposal assuring that such consultation has taken place.

- a. Faculty who would teach in the program, indicating rank, appointment status, highest degree earned, date and field of highest degree, professional experience, and affiliations with other campus programs. For master’s degrees, include faculty publications or curriculum vitae.

The MSAN is a pilot program offered through Extended University. For the pilot years, the Department of Kinesiology will work with Extended University to ensure that qualified instructors are hired. The five year goal will be to bring the MSAN program stateside with a total of five tenure track faculty positions.

- Jeff Moffit, EdD, Associate Professor, Exercise Physiology/Biomechanics
- Joshua Miller, DHSc, Assistant Professor, Exercise Physiologist, General Wellness
- Brian Street, Ph.D, Assistant Professor, Biomechanics
- Mirna Troncoso, PhD, Lecturer, Public Health

- Laurie Wallace, Registered Dietician, MS, RD, CDE, Lecturer, Nutrition & Dietetics
- Avtar Nijjer-Sidh, PhD, Lecturer, Nutrition & Health Education

Note: For all proposed graduate degree programs, a minimum of five full-time faculty members with the appropriate terminal degree should be on the program staff.

(Code Memo EP&R 85-20)

- b. Space and facilities that would be used in support of the proposed program. –This is an online self-supported program. Grant funds will provide Quality Matters support for faculty.
- c. A report provided by the campus Library, detailing resources available to support the program (discussion of subject areas, volume counts, periodical holdings, etc. are appropriate).-**In process**
- d. Existing academic technology, equipment, and other specialized materials currently available.-Faculty have computer access and will be trained in Quality Matters and Blackboard.

8. Additional Support Resources Required (CPEC “Total Costs of the Program”)

Note: If additional support resources will be needed to implement and maintain the program, a statement by the responsible administrator(s) should be attached to the proposal assuring that such resources will be provided.

- a. Any special characteristics of the additional faculty or staff support positions needed to implement the proposed program.-Grant funds will support the development of the program and staff support.
- b. The amount of additional lecture and/or laboratory space required to initiate and to sustain the program over the next five years. Indicate any additional special facilities that will be required. If the space is under construction, what is the projected occupancy date? If the space is planned, indicate campus-wide priority of the facility, capital outlay program priority, and projected date of occupancy.-No additional space required.
- c. A report written in consultation with the campus librarian, indicating any additional library resources needed. Indicate the commitment of the campus either to purchase or borrow through interlibrary loan these additional resources. –The department has consulted with the library (Ying Zhong and Johanna Alexander) regarding resources. The library currently has access to several relevant journals that would be applicable (Journal of Applied Nutrition, The Journal of Nutrition, The American Journal of Clinical Nutrition, Advances in Nutrition, Journal of Nutritional Science and many more). In addition there are a few more resources related to food and nutrition science in the library (Agricola, PubMed, Wiley Online Library and ScienceDirect). The library has suggested that we consider the Food Science Source by EBSCO (approximately \$4400).

- d. Additional academic technology, equipment, or specialized materials that will be (1) needed to implement the program and (2) needed during the first two years after initiation. Indicate the source of funds and priority to secure these resource needs.-Grant funds will provide technology support and training.