



Approved by Curriculum Committee on March 17, 2020

MEMORANDUM

TO: Faculty Senate

FROM: Susan Ross

DATE: April 6, 2020

SUBJECT: Curriculum Proposal #19-20-24

The Department of Health and Human Performance (HHP) proposes an 18-credit hour Minor in Nutrition Science. This minor is designed to broaden the student's knowledge of the biological sciences, with a particular emphasis on the interdisciplinary nature of nutrition. This minor would benefit those who intend to pursue careers in the food, health, and fitness industries, or those planning to enter health and exercise science, nursing, physical or occupational therapy, nutrition research, and nutrition communication. In addition, a minor in Nutrition Science could also assist in providing a strong knowledge base for students planning to attend graduate or medical school

cc: Richard Harvey
Cheri Gonzalez
Laura Ransom
Lori Schoonmaker
Andrea Haney
Jan Kiger

CURRICULUM PROPOSAL (Submit one hard copy and an electronic copy to the Associate Provost by the second Tuesday of the month.)

Proposal Number: #19-20-24

School/Department/Program: School of Education, Health & Human Performance/
Department of Health & Human Performance/
Nutrition Science Minor

Preparer/Contact Person: Dr. Andrea C. Haney and Jan Kiger

Telephone Extension: Haney x4509, Kiger x4984

Date Originally Submitted: Feb. 7, 2020

**Revision (Indicate date and label it
Revision #1, #2, etc.):** _____

Implementation Date Requested: Fall 2020

I. **PROPOSAL.** Write a brief abstract, not exceeding 100 words, which describes the overall content of the proposal.
The Department of Health and Human Performance (HHP) proposes an 18-credit hour Minor in Nutrition Science. This minor is designed to broaden the student's knowledge of the biological sciences, with a particular emphasis on the interdisciplinary nature of nutrition. This minor would benefit those who intend to pursue careers in the food, health, and fitness industries, or those planning to enter health and exercise science, nursing, physical or occupational therapy, nutrition research, and nutrition communication. In addition, a minor in Nutrition Science could also assist in providing a strong knowledge base for students planning to attend graduate or medical school.

II. **DESCRIPTION OF THE PROPOSAL.** Provide a response for each letter, A-H, and for each Roman Numeral II-V. If any section does not apply to your proposal, reply N/A.

A. Deletion of course(s) or credit(s) from program(s)

Total hours deleted. 0

B. Addition of course(s) or credit(s) from program(s)

Total hours added. 0

C. Provision for interchangeable use of course(s) with program(s) n/a

- D. Revision of course content. Include, as an appendix, a revised course description, written in complete sentences, suitable for use in the university catalog.

There would be no significant change in the content of the courses.

See Appendix C: Current Course Descriptions.

See Appendix D: Proposed Catalog Descriptions.

- E. Other changes to existing courses such as changes to title, course number, and elective or required status.

See Appendix C: Current Course Descriptions.

See Appendix D: Proposed Catalog Descriptions.

- F. Creation of new course(s). For each new course

1. Designate the course number, title, units of credit, prerequisites (if any), ownership (FSU or shared) and specify its status as an elective or required course. If you are creating a shared course, attach a memo from the Deans of the affected Schools explaining the rationale for the course being shared.

n/a

2. Include, as an appendix, a course description, written in complete sentences, suitable for use in the college catalog.

See Appendix D: Nutrition Science Minor Proposed Course Catalog Description

3. Include, as an appendix, a detailed course outline consisting of at least two levels.

Not applicable. Detailed course outlines already exist for these courses.

4. In order to meet the requirements as outlined in Goal One of the Strategic Plan, please include Outcome Competencies and Methods of Assessment as an appendix. Examples are available upon request from the Chair of the Curriculum Committee.

See Appendix E: Curriculum Map for Courses in Nutrition Science Minor.

- G. Attach an itemized summary of the present program(s) affected, if any, and of the proposed change(s).

Describe how this proposal affects the hours needed to complete this program. Specifically, what is the net gain or loss in hours? Use the format for Current and Proposed Programs in Appendix A.

n/a

III. RATIONALE FOR THE PROPOSAL.

- A. **Quantitative Assessment:** Indicate the types of assessment data, i.e., surveys, interviews, capstone courses, projects, licensure exams, nationally-normed tests, locally developed measurements, accreditation reports, etc., that were collected and analyzed to determine that curricular changes were warranted. Quantitative data is preferred.

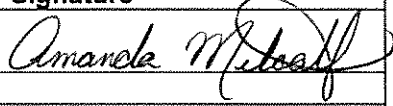
See Appendix F: Rationale for Proposal

- B. **Qualitative Assessment:** Based upon the assessment data above, indicate why a curricular change is justified. Indicate the expected results of the change. Be sure to include an estimate of the increased cost, or reduction in cost of implementation. FOR EXAMPLE: Will new faculty, facilities, equipment, or library materials be required?

See Appendix F: Rationale for Proposal

- IV. Should this proposal affect any course or program in another school, a memo must be sent to the Dean of each school impacted and a copy of the memo(s) must be included with this proposal. In addition, the Deans of the affected schools must sign below to indicate their notification of this proposal.

By signing here, you are indicating your college's/school's notification of this proposal.

College/School	Dean	Signature
School of Education, Health & Human Performance	Dr. Amanda Metcalf	

- V. Should this proposal affect any course to be added or deleted from the general studies requirements, a memo from the chair of the General Studies Committee indicating approval of the change must be included with this proposal.
n/a
- VI. ADDITIONAL COMMENTS.

APPENDIX A
Minor in Nutrition Science
Current Program

Required Minor Courses	HRS
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There is no current Minor in Nutrition Science

TOTAL Required Minor Courses

APPENDIX B
Minor in Nutrition Science
Proposed Program

Required Minor Courses		HRS
NUTR 1110	Nutrition	3
NUTR 1120	Nutrition for Childhood and Adolescence	3
NUTR 1145	Sports Nutrition	3
NUTR 1155	Farm to Fork	3
NUTR 2220	Nutrition Therapy	3
NUTR 2250	Epidemiology and Community Nutrition	3
TOTAL HOURS FOR MINOR		18

Appendix C

CURRENT COURSE DESCRIPTIONS

HLTA 1110 Nutrition3 hours.

This course is a study of the nutrients, their sources, and their relationship to body functions. Each stage of the life cycle will be studied as it relates to changing nutritional requirements for individuals and family groups of varying cultural and economic levels. Students will evaluate their daily nutritional intake against recommended daily allowances.

HLTA 1120 Nutrition in Childhood & Adolescence.....3 hours.

This course will provide an overview of basic nutrition as well as nutrient standards used to evaluate nutrition status among Americans. Specific focus will include nutrition needs from pre-pregnancy through adolescence. Students will evaluate dietary guidelines, conduct a diet analysis, and complete a menu planning assignment for an individual between the ages of 2-18.

HLTA 1145 Sports Nutrition.3 hours.

This course will provide an introduction to sports nutrition including definitions of sports nutrition and general nutrition concepts, a review of digestion and energy metabolism, a thorough explanation of macronutrients, micronutrients, and water as they relate to athletic performance. The course will also review the most current research as it relates to the energy systems and specific nutrition needs of athletes in three categories - endurance, strength/power, and team sports.

HLTA 1155 Local Market Agriculture.3 hours.

This course will cover topics in small farm viability and will explore the collaboration between farmers and chefs in supporting and promoting the local food market. In addition, students will examine local farmers' most common direct marketing opportunities. The student will be able to develop a farm to restaurant model, which will illustrate the importance of sharing the value of local foods.

HLTA 1199 Special Topics in Health.....1-12 hours.

Special topics will be studied, to be determined by the instructor and approved by the Department Chair or Associate Dean. Credits earned will be applicable as free electives in degree and certificate programs.

HLTA 2220 Diet Therapy.....3 hours.

This course discusses the nutritional needs of different age groups, the special nutritional requirements in various diseases and the planning of menus to meet these various nutritional needs. PR: HLTA 1110

HLTA 2250 Applications in Community & Medical Nutrition3 hours.

This course will provide students with methods and practices necessary to access nutritional needs in client-oriented dietetic systems and community-oriented nutrition programs. Students will apply nutrition knowledge to the following: patient education, screening for nutritional risk, determining nutrient requirements across the lifespan, translating nutritional needs into food and menu choices, calculating body composition, and calculating diets for specific health conditions. PR: HLTA 2220.

Appendix D

Nutrition Science Course Proposed Catalog Descriptions

NUTR 1110 Nutrition. 3 credits. This course is a study of the nutrients, their sources, and their relationship to body functions and metabolism. Stages of the lifecycle will be studied as it relates to changing nutritional requirements for individuals of varying cultural and economic levels. Students will evaluate their daily nutritional intake against recommended daily allowances, and complete a menu planning assignment.

NUTR 1120 Nutrition in Childhood and Adolescence. 3 credits. This course will provide an overview of basic nutrition as well as nutrient standards used to evaluate nutrition status among Americans. Specific focus will include nutrition during the periconceptional period, nutrition during pregnancy, and lactation. Additionally, students will be introduced to nutrition in infancy through adolescence. Students will evaluate dietary guidelines and complete a menu planning assignment for an individual between the ages of 2-18.

NUTR 1145 Sports Nutrition. 3 credits. This course will introduce sports nutrition including definitions of sports nutrition and general nutrition concepts, a review of digestion and energy metabolism, an in-depth explanation of macronutrients, micronutrients, and water as they relate to athletic performance. The course will also review the most current research as it relates to the energy systems and specific nutrition needs of athletes in categories including endurance, strength/power, and team sports. Students will evaluate and complete a menu specific to their assigned sport.

NUTR 1155 Farm to Fork. 3 credits. This course introduces the social responsibility of production of natural agricultural products meeting the growing public demand for healthy, organic, and whole foods. Students will examine the issues related to the economic prosperity of farm-to-fork concepts and marketing strategies of local farmers. In addition, students will be educated on food systems, food sources, the advantages of buying local, and environmental protection of food sustainability.

NUTR 2220 Nutrition Therapy. 3 credits. This course discusses the nutritional needs of different age groups, the special nutritional requirements in various diseases and the planning of menus to meet these various nutritional needs. Students will learn the role of nutrition therapy in healthcare, the nutrition care process, and be introduced to pathophysiology as it relates to nutrition. PR: NUTR 1110

NUTR 2250 Epidemiology and Community Nutrition. 3 credits. This course will provide students with methods and practices necessary to assess nutritional needs in community-oriented nutrition programs. Students will be introduced to nutrition relationships through the application of epidemiologic methods, develop and evaluate nutritional status of populations, examine the role of nutrition in the etiology of nutrition/disease relationships, and develop interventions to achieve and maintain healthful eating patterns among populations using nutritional measures. PR: NUTR 2220

Appendix E

Curriculum Map for Courses in Nutrition Science Minor

Program Student Learning Outcomes								
Prepared by: Dr. Andrea Haney				January 19, 2020				
1. Demonstrate critical thinking skills and analytical abilities to identify and explain dietary problems in the nutritional sciences.								
2. Evaluate nutritional status of individuals in various life-cycle stages and determine nutrition-related conditions and diseases by applying knowledge of metabolism and nutrient functions and food sources.								
3. Critique and effectively apply knowledge of the science of nutrition in professional health care environments.								
4. Describe the social and environmental responsibilities of food production and availability to facilitate healthy lifestyle choices.								
5. Recognize dietary patterns for prevention of chronic disease and demonstrate the necessary nutrient requirements.								
6. Analyze nutrition needs of communities and research incidence, distribution, and possible control of diseases and other factors relating to health.								
7. Formulate nutrition therapy for individuals throughout stages of life cycles.								
Core Curriculum Cores		Program Student Learning Outcomes						
		1	2	3	4	5	6	7
Nutrition	NUTR 1110	I- Quizzes	R- Written Assignment	M-Group Final/Menu Planning		R- Assignments		M- Final Exam
Nutrition in Childhood and Adolescents	NUTR 1120	I- Quizzes	R- Written Assignment	M-Group Final/Menu Planning	R- Activities/ Discussion Boards			M- Final Exam
Sports Nutrition	NUTR 1145	I- Quizzes	R- Written Assignment	M-Group Final/Menu Planning				M- Final Exam
Farm to Fork	NUTR 2210		I-Written Assignment		R- Activities/ Discussion Boards		M- Final Exam	
Nutrition Therapy	NUTR 2220	I- Quizzes	R- Written Assignment	R- Discussion Boards		M-Exams		M- Final Exam
Epidemiology and Community Nutrition	NUTR 2250	I- Quizzes		R- Discussion Boards	R- Activities/ Discussion Boards		M- Final Exam	
Level of Learning: I-Introduced, R-Reinforced, M-Mastered								
Key for Bloom's Taxonomy of the Cognitive Domain Red=Remembering and Understanding: Assignments that test student's ability to recall the facts and discuss the concepts. Purple=Applying and Analyzing: Assignments that test ability to differentiate and employ different skills. Orange=Evaluating: Assignments that require the students to select and defend decisions. Yellow=Creating: Assignments that require students to develop new concepts								

Appendix F

Rationale for Proposal

Quantitative Assessment

According to the U.S. Bureau of Labor Statistics (2020), the employment opportunities for nutritionists and dietitians are expected to increase by 11 percent from 2018 to 2028. Currently, there are 70,900 nutritionists and dietitians working in the U.S with this number proposed to increase to 78,900. This increase is attributed to the rising concerns of obesity, type 2 diabetes, and heart disease. Interest in the role of food and nutrition in promoting health and wellness has increased vastly due to recent trends toward eating locally grown, organic and non-genetically modified foods. This global interest has opened up other food nutrition-related opportunities such as community-based nutrition and epidemiological nutrition (U.S. Bureau of Labor Statistics, 2020).

Obesity is a major health problem on a national level, but is particularly persistent in West Virginia. According to the 2018 WV BRFSS the prevalence of obesity in West Virginia was 37.7%, which was 1st highest in the nation (Division of Health Promotion and Chronic Disease, 2018). More than two-thirds (70.9%) of West Virginia adults are overweight or obese. Additionally, the Pediatric Nutrition Surveillance System Survey (PedNSS) found a prevalence of obesity of 13.4% among children ages two through four in West Virginia who were enrolled in WIC (Women, Infants, and Children) (West Virginia Department of Health and Human Resources, 2018). On campuses across the nation college students struggle to maintain healthy lifestyles, as risky behaviors such as fast food consumption, physical inactivity, and stress have created a generation with a high incidence of obesity (Nanney et al., 2015).

The mission of Fairmont State University is to serve as a leader in improving the health of West Virginia and the global community and educate global citizen leaders. A unique pedagogically cross-curriculum development between nutrition science, nursing, exercise science, and physical education could yield the exceptional global leaders that allows Fairmont State University students to “soar” to innovative and higher economic career opportunities.

Nurses play an important role in the nutrition care process of patients as providing good nutrition to patients in hospitals and health care settings has become a primary focus in many nutrition and health delivery services (Masoodi, Seth, & Singh, 2019). Knowledge of nutrition enables the nurse to make sound assessments, to know when to make appropriate referrals, and to work effectively as a team member with dieticians in developing and accessing care plans to provide adequate nutrition for the patient. Nurses also work with children in schools and it is essential they are educated in adequate nourishment to help our youth deal with overweight and obesity during childhood and adolescence (Tsai, Luck, Jefferies, & Wilkes, 2019).

The role of sports nutrition has become an emergent area of research. Physical fitness, nutrition status, and sports-specific training can influence the performance of an athlete (Colleran, Alghuraybi, Fuller, Roberta, & Hall, 2019). Exercise science and exercise physiology students at Fairmont State University could benefit from this interdisciplinary nutrition minor to help both fields of study become more versatile and effective in training the next generation of extreme athletes.

It is of value that students of all disciplines gain an understanding of the benefits of local food production and practices. Nutrition educators are consistently searching for innovative methods to promote healthy eating as a prevention method for obesity and chronic disease. Educating college students on the implications of organic and whole food production related to economic prosperity, and the farm to fork concepts in marketing and

strategies would produce a generation of environmentally-conscious entrepreneurs related to food sustainability careers (Pelletier, Laska, Neumark-Sztainer, & Story, 2013).

Whether a student at Fairmont State University chooses to work in the nursing field, medicine, nutrition and food science, or government or non-profit organization, this minor will provide critical interdisciplinary educational resources to help each student be an effective and global citizen.

Qualitative Assessment

In three informal surveys during the 2020 Spring classes I successfully collected data related to perceived interest in additional courses related to nutrition. I identified a theme of positive interest and attitude in all three of the following courses; Nutrition 1110, Sports Nutrition 1145, and Nutrition for Childhood and Adolescents 1120. By a display of hands, 16 out of 53, or 30% of students indicating they have interest in a nutrition minor at Fairmont State University.

References

- Colleran, H. L., Alghuraybi, S., Fuller, T., Roberta, C. S., & Hall, E. E. (2019). Nutrition Knowledge of Division I Student-Athletes at A Private Four-Year Institution. Archives| Food and Nutrition| ReDelve: RD-FNU, 10002.
- Department of Health and Human Resources (2020). West Virginia Everyday... Retrieved from <http://dhhr.wv.gov/hpcd/Documents/Everyday%20Final.pdf>
- Department of Health and Human Resources (2018). *Obesity in West Virginia*. Retrieved on January 21, 2020 from <http://www.wvdhhr.org/bph/hsc/pubs/other/obesityreport2011/obesityreport2011.pdf>
- Division of Health Promotion and Chronic Disease. (2020). Data and Reports. Retrieved on January 23, 2020 from <https://dhhr.wv.gov/hpcd/Pages/default.aspx>
- Masoodi, N., Seth, V., & Singh, K. (2019). Role of Nurses in Nutrition Care in Hospitals in Srinagar City (Jammu and Kashmir, India). *J Nursing Care*, 8(480), 2167-1168. doi: 10.4172/2167-1168.1000480
- Nanney, M.S., Lytle, L.A., Farbakhsh, K., Moe, S.G., Linde, J.A., Gardner, J.K., & Laska, M.N. (2015). Weight and weight-related behaviors among 2-year college student. *Journal of American College Health*, 63(4), 221-229. doi:10.1080/07448481.215.1015022
- Pelletier, J. E., Laska, M. N., Neumark-Sztainer, D., & Story, M. (2013). Positive attitudes toward organic, local, and sustainable foods are associated with higher dietary quality among young adults. *Journal of the Academy of Nutrition and Dietetics*, 113(1), 127-132. doi: 10.1016/j.jand.2012.08.021
- Tsai, T. I., Luck, L., Jefferies, D., & Wilkes, L. (2019). Exploring the knowledge of student nurses about children who are overweight/obese. *Clinical Nursing Studies*, 63-69. doi:10.5430/cns.v7n4p63



Memorandum

To: Susan Ross
Executive Director of Academic Programs and Support Services

From: Amanda Metcalf
Interim Associate Dean

Date: February 10, 2020

Re: Program Proposal – M.Ed. in Educational Leadership

The School of Education, Health and Human Performance has voted to approve the Curriculum Proposal for an 18-credit hour minor in Nutrition Science. The vote occurred at our School meeting on February 6, 2020.