

## Program Approval

### I. General Information

**A. Institution** University of Kansas

### B. Program Identification

Degree Level:	Bachelor's
Program Title:	Nutrition
Degree to be Offered:	Bachelor of Science
Responsible Department or Unit:	School of Professional Studies
CIP Code:	30.1901
Modality:	Hybrid
Proposed Implementation Date:	Fall 2026

Total Number of Semester Credit Hours for the Degree: 120

### II. Clinical Sites: No

### III. Justification

Diet-related diseases are the leading cause of death in the United States today (Matthews and Kurnat-Thoma, 2024). These include heart disease, cancer, stroke, diabetes, kidney disease, chronic lung diseases, liver disease, hypertension, and nutritional deficiencies. Within the U.S., poor nutrition is attributed to six of the leading causes of death. The developmental, economic, social, and medical impacts of the global burden of malnutrition are serious and lasting for individuals and their families, for communities, and for countries.

The proposed BS in Nutrition offers a comprehensive understanding of how food and nutrition impact health, providing students with the foundational knowledge to pursue careers as nutritionists, dietitians, or related roles in the health field. Graduates of this program can work as health educators in the community; in federal programs such as USDA Food and Nutrition programs; in community food programs such as food banks, food pantries, and farmers markets; as corporate wellness coordinators; in food marketing and sales; or as health and nutrition writers. Additionally, with the strong foundation in science and research provided in this program, graduates are well prepared for admission to other graduate and professional programs (e.g., medical school, clinical lab sciences, biomedical science, Physical/Occupational Therapy).

Student interests and market needs, particularly in the Eastern part of the State, are well aligned with this program. Additionally, this proposal intentionally builds on the popular existing minor in Nutrition (with 114 students enrolled in Fall 2024) and establishes a bridge to the Master of Science in Dietetics and Nutrition graduate program at the University of Kansas Medical Center. Offering a Bachelor of Science will support retention and degree completion rates of KU students seeking a profession in this field and expand KU's portfolio of science-based health-related degrees.

The proposed program is developed with transfer students in mind and will be offered through the School of Professional Studies at the Edwards Campus in Overland Park. The Edwards Campus does not offer lower-division courses, but students are likely to fulfill those requirements at a community college. While this program is offered through the School of Professional Studies, incoming Lawrence-based students interested in pursuing the Nutrition degree are able to begin program requirements in their freshman year, which positions them to complete the degree program entirely at KU.

Though there are substantial foundational science requirements, as outlined in Appendix A, the program intentionally holds space for electives for students who may not have maximized the overlap between the

Systemwide General Education requirements and the degree requirements. Students who have more available electives upon entering their junior year will be encouraged to consider a minor. Examples of complementary minors include, but are not limited to Public and Population Health, Environmental Health, Psychology, and Sociology. The proposed degree supports students' future success in a broad spectrum of roles in nutrition, health, and wellness fields while also fulfilling many pre-requisite requirements for graduate programs in health-related areas.

#### **IV. Program Demand**

##### **Market Analysis**

Only one public institution in Kansas offers programs with the same CIP Code. Kansas State University offers a Bachelor of Science in Nutrition and Health, an online BS completion program in Dietetics, and Nutrition and Health, and a BS in Sports Nutrition.

Two public universities in the Kansas City metro area offer nutrition degrees but only at the graduate level:

- University of Kansas Medical Center (KUMC) offers a Master of Science in Dietetics and Nutrition. This program is designed for students who want to become registered dietitians (RDs). RDs are qualified healthcare professionals who assess, diagnose, and treat nutritional problems. The KUMC program is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND).
- University of Central Missouri (UCM) offers a Master of Science in Nutrition with a Clinical Nutrition option. This program is designed for students who want to work in a clinical setting, such as a hospital or clinic. The UCM program is also accredited by ACEND.

Other Regional Nutrition programs at comparable 4-year public universities:

- Iowa State University offers a Bachelor of Science in Food Science and Human Nutrition program. This program combines the study of food science with nutrition, preparing students for careers in areas such as food product development, food safety, and clinical nutrition.
- University of Missouri-Columbia offers a BS in Nutrition and Exercise Science which is also part of the accelerated MS in Dietetics, and also a BS in Food science and Nutrition. This program provides a strong foundation in the science of nutrition and prepares students for a variety of careers in the field.
- University of Nebraska-Lincoln offers a Bachelor of Science in Nutrition and Dietetics program. This program is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) and prepares students for careers as registered dietitians.
- Colorado:
  - Colorado State University offers a BS in Nutrition, with three concentrations in Sport Nutrition, Dietetics and Nutrition Management, and Pre-Health Nutrition.
  - Metropolitan State University (Denver, CO) has three undergraduate degrees, in Nutrition Science, Nutrition Studies, and Dietetics and Nutrition.
  - University of Northern Colorado has a BS in Nutrition and a BS in Dietetics, as well as a MS in Dietetics.
- Oklahoma:
  - Oklahoma State University offers a BS in Nutrition Science, with four specialty options in Public Health Nutrition, Human Nutrition/Pre-Medical Sciences, Allied Health, and Dietetics.
  - University of Central Oklahoma offers a BS in Nutrition, Dietetics and Food Management.

The field of Nutrition is growing and complex and warrants a variety of pathways for students to study this discipline. With this in mind, this proposal capitalizes on the School of Professional Studies’ strong relationships with Kansas City metro-area community colleges, well-established transfer pathways focused on workforce needs and a close relationship with the University of Kansas Medical Center. This proposed program will provide a variety of academic on-ramps for students to enter this field and a variety of academic and career pathways upon graduation. Examples of the pathways for graduates are in three distinct areas: 1) pursuing a Master of Science in Dietetics and Nutrition to become a Registered Dietitian (the curriculum for the BS in Nutrition is intentionally and collaboratively designed with the KU Medical Center as the Commission on Dietetics Registration (CDR) requires a minimum of a masters’ degree to be eligible to take the credentialing exam to become a Registered Dietitian), 2) pursuing other graduate and professional programs (e.g., medical school, clinical lab sciences, biomedical science, Physical/Occupational Therapy), and 3) direct entry into the workplace in fields such as public health, health policy and education, and sports/wellness nutrition.

## V. Projected Enrollment for the Initial Three Years of the Program

Year	Total Headcount Per Year		Total Sem Credit Hrs Per Year	
	Full- Time	Part- Time	Full- Time	Part- Time
Implementation	15	5	450	60
Year 2	30	10	900	120
Year 3	40	15	1,200	180

## VI. Employment

Bureau of Labor Statistics data support the development of an undergraduate Bachelor of Science in nutrition in the metro area. Nationally, employment of dietitians and nutritionists is projected to grow seven percent from 2022 to 2032, faster than the average for all occupations. This growth is driven by an increasing awareness of the importance of diet and nutrition in preventing and managing certain diseases and a growing interest in promoting health and wellness. The national median annual wage for dietitians and nutritionists was \$69,680 in May 2023, with outpatient care centers and hospitals paying 10-15% above the median. BLS data indicate that the Kansas City metro area, in particular, employs a higher-than-expected number of dietitians and nutritionists, likely due in part to the concentration of hospitals and medical facilities in the metro area, and the number of clinical research organizations.

There are many career opportunities for BS-Nutrition graduates to find employment in the nutrition, health, and wellness sectors to serve the public in the state of Kansas and the nation. Sports nutrition, nutrition education, and public health nutrition are three in-demand specialties within the domain of nutrition that the KU program is particularly suited to address. Undergraduate students completing the proposed program may work as nutrition and health coaches in the nutrition, health and wellness industry, while students interested in pursuing additional education and licensure through graduate programs may become registered dietitian nutritionists. Furthermore, the robust and scientific-based curriculum of the proposed program ensures that program alumni are competitive for graduate and professional degrees in medical and healthcare fields.

## VII. Admission and Curriculum

### A. Admission Criteria

This program intends to follow the institution’s Qualified Admission criteria.

### B. Curriculum

Appendix A provides a list of specific course requirements as organized by curricular categories (e.g., foundational science and nutrition core).

**Year 1: Fall****SCH = Semester Credit Hours**

<b>Course #</b>	<b>Course Name</b>	<b>SCH</b>
BIOL 150	Principles of Molecular and Cellular Biology	3
BIOL 154	Introductory Biology Lab for STEM Majors	2
MATH 101	KBOR Mathematics & Statistics Discipline Area - College Algebra	3
A&H	KBOR Arts & Humanities Discipline Area	3
ENGL	KBOR English Discipline Area	3
		Tot:14

**Year 1: Spring**

<b>Course #</b>	<b>Course Name</b>	<b>SCH</b>
BIOL 240	Fundamentals of Human Anatomy	3
CHEM 130	General Chemistry I	5
A&H	KBOR Arts & Humanities Discipline Area	3
ENGL	KBOR English Discipline Area	3
S&BS	KBOR Social & Behavioral Science Discipline Area	3
		Tot:17

**Year 2: Fall**

<b>Course #</b>	<b>Course Name</b>	<b>SCH</b>
CHEM 135	General Chemistry II	5
HSCI 320	Principles of Nutrition	3
COMS	KBOR Communications Discipline Area	3
S&BS	KBOR Social & Behavioral Science Discipline Area	3
		Tot:14

**Year 2: Spring**

<b>Course #</b>	<b>Course Name</b>	<b>SCH</b>
BIOL 246	Principles of Human Physiology	3
CHEM 330	Organic Chemistry I	3
CHEM 331	Organic Chemistry I Lab	2
	KBOR Natural & Physical Science Designated Area	4
	KBOR Institutional Designated Area	3
		Tot:15

**Year 3: Fall**

<b>Course #</b>	<b>Course Name</b>	<b>SCH</b>
BIOL 200 or BSCI 400	Microbiology	3
HSCI 316	Career Exploration in Nutrition	3
HSCI 421	Public Health Nutrition	3
HSCI 422	Nutrition Assessment	3
	KBOR Institutional Designated Area	3
		Tot:15

**Year 3: Spring**

<b>Course #</b>	<b>Course Name</b>	<b>SCH</b>
-----------------	--------------------	------------

BIOL 600 or BSCI 600	Biochemistry	3
HSCI 420	Nutrition Through the Life Cycle	3
HSCI 425	Nutrition Education	3
MATH 365	Statistics	3
	Elective	3
		Tot:15

**Year 4: Fall**

Course #	Course Name	SCH
HSCI 521	Advanced Nutrition & Metabolism	3
HSCI 525	Nutrition Research Methods	3
	Elective	3
	Elective	3
	Elective	3
		Tot:15

**Year 4: Spring**

Course #	Course Name	SCH
HSCI 523	Nutrition in Disease Treatment and Prevention	3
HSCI 598	Capstone in Nutrition	3
	Nutrition Elective	3
	Elective	3
	Elective	3
		Tot:15

**Total Number of Semester Credit Hours ..... 120**

**VIII. Core Faculty**

Note: \* Next to Faculty Name Denotes Director of the Program, if applicable  
 FTE: 1.0 FTE = Full-Time Equivalency Devoted to Program

Faculty Name	Rank	Highest Degree	Tenure Track Y/N	Academic Area of Specialization	FTE to Proposed Program
TBH*	Full/Associate/Assistant Teaching Professor and Program Lead	PhD	N	Medical Nutrition Science, Public Health Nutrition	1.0
Jessica Provost	Assistant Teaching Professor	PhD	N	Medical Nutrition Science, Sports Nutrition	.75
Austin Sullivan	Assistant Teaching Professor	PhD (expected Dec 2024)	N	Medical Nutrition Science	.75
Mark Jakubauskas	Teaching Professor	PhD	N	Health Sciences	.13

Brendan Mattingly	Associate Teaching Professor	PhD	N	Molecular Bioscience	.13
Sonia Thomas	Assistant Professor of the Practice	PhD	N	Molecular Bioscience	.13
TBH Year 2	Assistant Teaching Professor	PhD	N	Medical Nutrition Science and/or Public Health Nutrition	.75

Number of graduate assistants assigned to this program ..... **0**

**IX. Expenditure and Funding Sources**

<b>A. EXPENDITURES</b>	First FY	Second FY	Third FY
<b>Personnel – Reassigned or Existing Positions</b>			
Faculty	\$197,091	\$203,004	\$209,094
Administrators ( <i>other than instruction time</i> )	\$-	\$-	\$-
Graduate Assistants	\$-	\$-	\$-
Support Staff for Administration ( <i>e.g., secretarial</i> )	\$4,590	\$4,728	\$4,870
Fringe Benefits ( <i>total for all groups</i> )	\$61,595	\$62,805	\$64,051
Other Personnel Costs	\$50,000	\$50,000	\$50,000
<b>Total Existing Personnel Costs – Reassigned or Existing</b>	\$313,276	\$320,537	\$328,015
<b>Personnel – New Positions</b>			
Faculty	\$42,000	\$110,760	\$114,083
Administrators ( <i>other than instruction time</i> )	\$63,000	\$64,890	\$66,837
Graduate Assistants	\$-	\$-	\$-
Support Staff for Administration ( <i>e.g., secretarial</i> )	\$-	\$-	\$-
Fringe Benefits ( <i>total for all groups</i> )	\$31,123	\$52,845	\$53,899
Other Personnel Costs	\$-	\$-	\$-
<b>Total Existing Personnel Costs – New Positions</b>	\$136,123	\$228,495	\$234,819
<b>Start-up Costs - One-Time Expenses</b>			
Library/learning resources	\$15,000	\$15,000	\$-
Equipment/Technology	\$1,375	\$1,375	\$-
Physical Facilities: Construction or Renovation	\$-	\$-	\$-
Other	\$15,000	\$15,000	\$-
<b>Total Start-up Costs</b>	\$31,375	\$31,375	\$-
<b>Operating Costs – Recurring Expenses</b>			
Supplies/Expenses	\$225	\$281	\$281

Library/learning resources	\$-	\$-	\$-
Equipment/Technology	\$-	\$-	\$-
Travel	\$442	\$442	\$442
Other – marketing/recruiting, faculty professional development, instructional resources	\$17,200	\$18,250	\$18,250
<b>Total Operating Costs</b>	\$17,867	\$18,973	\$18,973
<b>GRAND TOTAL COSTS</b>	\$498,641	\$599,380	\$581,807

<b>B. FUNDING SOURCES</b> <i>(projected as appropriate)</i>	Current	First FY (New)	Second FY (New)	Third FY (New)
Tuition / State Funds	\$ 0	\$ 252,450	\$ 504,900	\$ 683,100
Student Fees	\$ 0	\$ 0	\$ 0	\$ 0
Other Sources (JCERT)	\$ 0	\$ 246,191	\$ 94,480	\$ 0
<b>GRAND TOTAL FUNDING</b>	\$ 0	\$ 498,641	\$ 599,380	\$ 683,100
<b>C. Projected Surplus/Deficit (+/-)</b> (Grand Total Funding <i>minus</i> Grand Total Costs)		\$ 0	\$ 0	\$101,293

## X. Expenditures and Funding Sources Explanations

### A. Expenditures

#### Personnel – Reassigned or Existing Positions

The BS in Nutrition program will utilize some existing courses and faculty that are currently offered at KU as part of the School of Professional Studies curriculum.

Five current faculty will have portions of their workloads redistributed to meet the needs of this new program; the proportions of the combined teaching loads are equivalent to 2.0 FTE and is budgeted for \$197,091 in salary for year one. Additionally, the existing Administrative Associate that supports academic programs within the School of Professional Studies will be budgeted at .1 FTE, which is \$4,590 in year one salary expenses. Fringe for these totals \$61,595 in year one. The budget anticipates a 3% increase for these expenses in years two and three. The budget also includes \$50,000/year for advising and navigator support for prospective and current students. This support model is intentionally designed to introduce and familiarize transfer students with the unique program and institutional structures for Nutrition. This wage is budgeted to be flat year over year until the program exceeds 150 enrolled students.

#### Personnel – New Positions

Upon approval of this proposal, a new person will be hired to fill the role of program director for the BS in Nutrition. The person's time will be split with 40% designated to teaching and 60% designated to administration.

The Nutrition program will hire one new faculty member at \$90,000/year with an emphasis in Medical Nutrition Science and Public Health Nutrition or a related field in year two of the program. This hire will have .75FTE allocated to teaching courses within the Nutrition degree and .25FTE to other areas (such as Health Sciences). A 3% increase is budgeted for these new positions in years two and three.

### **Start-up Costs – One-Time Expenses**

To ensure a successful launch of the program, we have designated \$30,000/year during the first two years for course development and library resources. Estimated costs will be evenly split between investing in additional library collections and course development. Years one and two also budget for new laptops and other equipment to support new hires.

### **Operating Costs – Recurring Expenses**

Operating costs include supplies and travel/mileage (10 round trips to and from the Larwence and Edwards Campus per year: 66 miles \* \$.67/mile for faculty driving between campuses). Other operating expenses include instructional resources, recruitment efforts, and marketing efforts. Program faculty members will also receive \$1,400 each year for professional development.

### **B. Revenue: Funding Sources**

The BS in Nutrition program has been approved for funding by the Johnson County Education and Research Triangle<sup>1</sup> (JCERT) Board. The program will be fully funded through JCERT funds and tuition revenue. No state funds will be utilized. JCERT funds will be used to help fund the program during the implementation year until the program is revenue generating and sustainable on tuition funds alone. Due to the unique location of the Edwards Campus, the BS in Nutrition program is seeking a non-standard tuition rate of \$495 per credit hour to ensure that the program is affordable and accessible to all students throughout the Kansas City metropolitan area and those who recently relocated to the area.

### **C. Projected Surplus/Deficit**

Given the anticipated costs and revenue, the program is expected to be self-sustaining in year three. JCERT funds will be used to help fund the program during the implementation until the program is revenue generating and sustainable on tuition funds alone.

As enrollment for the program scales, surplus revenue will be utilized to help improve the overall student experience, provide additional funding to support services, and hire additional faculty, as needed.

## **XI. References**

Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Dietitians and Nutritionists, at <https://www.bls.gov/ooh/healthcare/dietitians-and-nutritionists.htm> (visited December 10, 2024).

Matthews ED and Kurnat-Thoma EL (2024). U.S. food policy to address diet-related chronic disease. *Front. Public Health*. 12:1339859. doi: 10.3389/fpubh.2024.1339859

---

<sup>1</sup> The Johnson County Education Research Triangle (JCERT) is a unique partnership between Johnson County, the University of Kansas, and Kansas State University. Its goal is to create economic stimulus and a higher quality of life through new facilities for research and educational opportunities. In November 2008, Johnson County voters invested in the county's future by voting for a 1/8-cent sales tax to fund JCERT initiatives, including development of the National Food and Animal Health Institute at K-State Olathe; the KU Clinical Research Center in Fairway, Kansas; and here at KU Edwards, the BEST Building with several degree and certificate offerings in business, engineering, science, and technology.



## Appendix A: Required Courses for the BS in Nutrition

- **Kanas Systemwide General Education: 34-35 credit hours**
  - English Discipline – 6 credit hours
  - Communications Discipline – 3 credit hours
  - Social & Behavioral Science Discipline Area – 6 credit hours
  - Mathematics and Statistics Discipline Area – 3 credit hours
    - MATH 101 College Algebra
  - Natural & Physical Science Discipline Area – 4-5 credit hours
  - Arts & Humanities Discipline Area – 6 credit hours
  - Institutionally Designated Area – 6 credit hours
- **Foundational Science: 38 credit hours**
  - BIOL 150: Principles of Molecular and Cellular Biology – 3 credits hours
  - BIOL 154: Introductory Biology Lab for STEM Majors – 2 credits hours
  - BIOL 200: Basic Microbiology or BSCI 400: Microbiology – 3 credits hours
  - BIOL 240: Fundamentals of Human Anatomy – 3 credits hours
  - BIOL 246: Principles of Human Physiology – 3 credits hours
  - BIOL 600: Introductory Biochemistry or BSCI 600: Biochemistry – 3 credits hours
  - CHEM 130: General Chemistry I – 5 credits hours
  - CHEM 135: General Chemistry II – 5 credits hours
  - CHEM 330: Organic Chemistry I – 3 credits hours
  - CHEM 331: Organic Chemistry I Laboratory – 2 credits hours
  - MATH 365: Elementary Statistics – 3 credits hours
- **Nutrition Core: 27 credit hours**
  - HSCI 316: Exploring Careers in Nutrition – 3 credits hours
  - HSCI 320: Principles of Nutrition – 3 credits hours
  - HSCI 420: Nutrition Through the Life Cycle – 3 credits hours
  - HSCI 421: Public Health Nutrition – 3 credits hours
  - HSCI 422: Nutrition Assessment – 3 credits hours
  - HSCI 425: Nutrition Education – 3 credits hours
  - HSCI 521: Advanced Nutrition and Metabolism – 3 credits hours
  - HSCI 523: Nutrition in Disease Treatment and Prevention – 3 credits hours
  - HSCI 525: Nutrition Research Methods – 3 credits hours
- **Nutrition Capstone: 3 credit hours**
  - HSCI 598 Nutrition Capstone – 3 credits hours