



*new program
Dec meeting*

October 28, 2019

RECEIVED

OCT 29 2019

**Coordinating Commission
for Postsecondary Ed.**

Dr. Michael Baumgartner
Executive Director
Coordinating Commission for
Postsecondary Education
140 N. 8th Street, Suite 300
Lincoln, NE 68509

Dear Michael:

Enclosed is a copy of the proposal to establish the **Occupational Safety and Health** *Graduate* **Professional Certificate** in the Department of Environmental, Agricultural, and Occupational Health in the College of Public Health at **UNMC**. The proposal was approved by the Board of Regents at the October 25, 2019 meeting. Also enclosed is the Proposal for New Instructional Program Form 92-40.

Please do not hesitate to contact me if you have any questions.

Sincerely,

David S. Jackson, Ph.D.
Interim Executive Vice President and Provost

Enclosures

c: Chancellor Jeffrey Gold
Senior Vice Chancellor Dele Davies
Dean Ali Khan, College of Public Health

**COORDINATING COMMISSION
FOR POSTSECONDARY EDUCATION**

140 N. 8th Street, Suite 300
Lincoln, NE 68508

Telephone: (402) 471-2847
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PROPOSAL FOR NEW INSTRUCTIONAL PROGRAM
Form 92-40

SECTION I

Institution Submitting Proposal: University of Nebraska Medical Center

Title of Program: Occupational Health and Safety Professional Certificate

CIP Code: 51.2206

Organizational Unit in which program will be located:
Department of Environmental, Agricultural, and Occupational Health
College of Public Health

Name of contact person in the event additional information is needed: Dr. David S. Jackson

Telephone: 402-472-5242

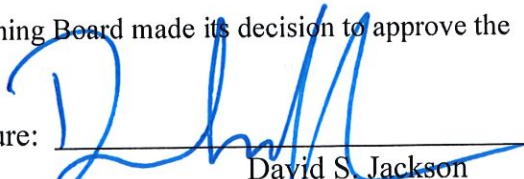
Degree, Diploma, or Certificate to be offered (use separate submittal for each level):
Occupational Safety and Health Professional Certificate

Proposed date to initiate program: When approved by the Coordinating Commission

List the location(s) where this program will be offered: UNMC

If the program has a projected ending date, please so indicate:

Date approved by Governing Board: October 25, 2019
(Attach all documents related to this proposal upon which the Governing Board made its decision to approve the proposal.)

Chief Executive Officer's or other Authorized Officer's signature: 
David S. Jackson

TO: The Board of Regents Addendum IX-A-1
Academic Affairs

MEETING DATE: October 25, 2019

SUBJECT: Establishment of the Occupational Safety and Health Professional Certificate in the Department of Environmental, Agricultural, and Occupational Health in the College of Public Health at the University of Nebraska Medical Center (UNMC)

RECOMMENDED ACTION: Approval is requested to establish the Occupational Safety and Health Professional Certificate in the Department of Environmental, Agricultural, and Occupational Health in the College of Public Health at UNMC

PREVIOUS ACTIONS: January 27, 2012 – The Board approved the deletion of the Master of Science (MS) degree in Environmental Health, Occupational Health, and Toxicology at UNMC.

April 16, 2010 – The Board approved a change in administration of the Master of Public Health (MPH) program from joint status (UNMC/ UNO) to UNMC, and from the Graduate College to the UNMC College of Public Health as a professional degree.

EXPLANATION: The 12-credit hour professional graduate certificate in Occupational Safety and Health is designed for graduate students, public health professionals, and health care providers who seek graduate level training in occupational safety and health. Students will learn about physical and psychosocial hazards in occupational environments, risk assessment, applying control measures and monitoring their effectiveness, and environmental assessment and modeling. The curriculum will allow students to meet the coursework eligibility requirement for the Certificate in Industrial Hygiene exam offered by the American Board of Industrial Hygiene. Completed coursework also may be applied towards completion of the Master of Public Health with an emphasis in Environmental and Occupational Health or the Doctoral Program in Environmental Health, Occupational Health, and Toxicology.

This proposal has been reviewed by the Council of Academic Officers; it also has been reviewed by the Academic Affairs Committee.

PROGRAM COST: \$19,671 for year one; \$103,661 over five years

SOURCE OF FUNDS: Tuition and fees

SPONSORS: H. Dele Davies
Senior Vice Chancellor

Jeffrey P. Gold, Chancellor
University of Nebraska Medical Center

RECOMMENDED:



David S. Jackson
Interim Executive Vice President and Provost

DATE:

September 27, 2019

UNMC Proposal for a New Professional Certificate Program Certificate in Occupational Safety and Health

Sponsoring department(s) in the College of Public Health

Environmental, Agricultural, and Occupational Health

Proposed Start Date

Upon approval

Certificate Title

Certificate in Occupational Safety and Health

CIP Code

51.2206

Program Description

The Certificate in Occupational Safety and Health is designed for practicing and aspiring occupational health and safety (OHS) practitioners who seek to improve OHS practices and/or compliance in their organizations. Students will learn about physical and psychosocial hazards in occupational environments, risk assessment, applying control measures and monitoring their effectiveness, and environmental assessment and modelling. Students are eligible for additional certifications—the 30-hour Occupational Safety and Health [OSHA] General Industry card (course: CPH 590) and the Certified Occupational Hearing Conservationist credential (course: ENV 909) from the Council for the Accreditation of Occupational Hearing Conservationists. The Graduate Certificate in Occupational Safety and Health also meets the Industrial Hygiene specific coursework requirement for the Certificate in Industrial Hygiene exam (one of three eligibility requirements to take the exam).

This professional certificate program is intended for graduate students, public health professionals, and health care providers who seek graduate level training in occupational safety and health.

A. Centrality to Role and Mission

The goal of this certificate program is to train occupational health and safety (OHS) practitioners to improve OHS practices and/or compliance in their organizations to improve worker safety in Nebraska and the United States. This is consistent with the mission of the University of Nebraska Medical Center (UNMC) to create a healthy future for all individuals and communities and the mission of the College of Public Health (COPH) to promote optimal health and well-being through robust education, research, and service in collaboration with communities in Nebraska, across the country, and around the world. The college is the major provider of professional and graduate education for the public health workforce and occupational health and safety in Nebraska and the region.

B. Evidence of Need and Demand

As of 2018, there were fewer than 50 Certified Industrial Hygienists and Certified Safety Professionals in Nebraska, serving approximately 1 million workers. Many health and safety programs in Nebraska are run by personnel who lack formal training in occupational health and safety. Between 2009 and 2014, Nebraska had higher rates of fatal work-related injuries and nonfatal injuries and illnesses compared to the national rates. The work-related severe traumatic injury hospitalization rate nearly doubled during this time. Nebraska's rate of work-related musculoskeletal disorders was higher than the national average rate in 2014.

The U.S Department of Labor short term projections for Nebraska show a 2.7% increase in occupational health and safety specialists and a 6.7% increase in occupational health and safety technicians between 2018-2020. Long term projections are even greater, occupational health and safety specialists are projected to increase by 9.6% and occupational health and safety technicians are projected to increase by 13.3% in Nebraska between 2016-2026. Nationwide, long-term projections show an increase for occupational health and safety specialists and technicians of 8.1% and 9.9% respectively (<https://projectionscentral.com/>).

Credit hours successfully completed in the Professional Certificate in Occupational Safety and Health are eligible to be applied towards completion of the Master of Public Health (MPH) with an emphasis in Environmental and Occupational Health or the Doctoral Program in Environmental Health, Occupational Health, and Toxicology. The College of Public Health is accredited by the Council for Education in Public Health. Graduates with occupational safety and health expertise will find employment with various government agencies, health insurance, private industry, and consulting firms.

The UNMC COPH has a unique opportunity to provide specialized training in worker health and safety. The proposed Certificate in Occupational Safety and Health at UNMC COPH will have the potential to attract students from other states. UNMC's standing as an academic medical center, its Biocontainment Unit, and its federally funded Center for Agricultural Health and Safety are expected to bring students who are interested in health and safety in healthcare or agriculture.

Program of Study

This is a professional certificate program in which a prospective student is expected to have a bachelor's degree from an accredited college or university. This certificate is in full alignment with the University of Nebraska's Strategic Planning Framework to "play a critical role in building a talented, competitive workforce." The COPH is fully equipped to respond to the growing need for health professionals trained in occupational health and safety. This certificate will help fulfill UNMC's strategic goals by offering health professionals an opportunity to engage in professional training specific to occupational health and safety, thereby enhancing their skills in serving the needs of the state population as well as the population of the world.

The Graduate Certificate in Occupational Health and Safety was created to appeal to a broad stakeholder base. This includes applicants wishing to take the Certified Industrial Hygienist [CIH] exam as well as applicants with little formal training in occupational health and safety and seasoned professionals who would like to get deeper into specific topics or earn additional credentials. The certificate program is flexible and can be tailored to an applicant's needs. Occupational Health and Safety professionals practice in industry, health care settings, and in agriculture. Applicants to the certificate program will be individually advised by a faculty member on the courses they should

take based on their experiences in occupational safety and health, career goals, and interest in the CIH exam.

The curriculum of the occupational safety and health certificate is consistent with UNMC professional-level education. The certificate program will consist of 12 semester credit hours of coursework. The courses included in the certificate are existing UNMC graduate or professional courses that are routinely offered by the COPH.

Curriculum – The program requires successful completion of 12 credit hours. This can be accomplished in as few as two consecutive semesters (fall, spring). Applicants to the certificate program will be individually advised by a faculty member on the courses they should take based on their experiences in occupational safety and health, career goals, and interest in the CIH exam.

Required Courses (all courses are 3 credit hours)	Semester offered
CPH 598 Fundamentals of Industrial Hygiene	Fall
CPH 590: Elements of Industrial Safety for Health Sciences	Spring

Elective Courses (students pick a minimum of 2 courses)	
CPH 517 Human Factors and Ergonomics	Summer
CPH 511 Agricultural Health and Safety	Summer
ENV 909: Occupational Noise and Hearing Loss	Spring
CPH 594: Environmental Exposure Assessment	Fall
CPH 597: Principles of Toxicology	Spring
ENV 903: Injury Epidemiology	Spring
ENV 908: Thermal Stress in the Work Environment	Summer
CPH 506: Introduction to Biostatistics	Fall/Spring
CPH 504: Epidemiology in Public Health	Fall/Spring
EPI 925: The Practice of Infectious Disease Epidemiology	Fall

For students planning to take the CIH exam – This certificate fulfills one of the three eligibility requirements, industrial hygiene specific coursework, to take the CIH exam. To meet the industrial hygiene specific coursework requirement students must take: CPH 598: Fundamentals of Industrial Hygiene; CPH 590: Elements of Industrial Safety for Health Sciences; CPH 594: Environmental Exposure Assessment; and CPH 597: Principles of Toxicology.

Duration/Scheduling of the Program – The recommended duration for the certificate program is two academic semesters (fall, spring). All credits must be earned within two years. Extensions may be granted if the student can document extenuating circumstances.

Recommended Course Sequence for Fall Admission:

Fall	Spring	Summer
CPH 598 Fundamentals Industrial Hygiene	CPH 590 Elements of Industrial Safety	Elective
Elective	Elective	

Recommended Course Sequence for Spring Admission:

Spring	Fall	Spring
CPH 590 Elements of Industrial Safety	CPH 598 Fundamentals Industrial Hygiene	Elective
	Elective	

Learning

Scholarship Requirements – To maintain good academic standing, certificate students are required to maintain a minimum Grade Point Average (GPA) of 3.0 (Grade B) in their program of study. A grade of C (2.0) may be accepted for no more than one course; receipt of two grades of C or any grade below a C is not acceptable for professional/graduate credit and may result in dismissal from the program.

A student who fails to maintain a GPA 3.0 or above will automatically be on academic probation and may not continue his/her program of study without the permission of the Curriculum Committee. In order to secure this permission, the student, in conjunction with his/her academic advisor, must submit a plan of remediation for approval to the Curriculum Committee at least two (2) calendar weeks prior to the next scheduled Curriculum Committee meeting (Instructions for Developing a Plan of Remediation for Academic Standing, see COPH Student Handbook for more details). The Curriculum Committee will review the student’s status and plan of remediation. To continue in the certificate program, the student must remove the probationary status (i.e., return to an overall 3.0 or above GPA) within the next twelve (12) months.

Completion of 12 credits of prescribed course work with a minimum 3.0 GPA is required. At least 9 of these credits must be completed at the COPH. The Curriculum Committee may permit up to three (3) transfer credit hours.

Need for Diverse Student Group

The certificate program will follow UNMC guidelines for student diversity, which promotes equal educational and employment opportunities in the academic and work environment. In accordance with University Policy, UNMC prohibits the denial of admission or of Medical Center privileges to students or applicants on the basis of individual characteristics such as race, color, sex, national origin, age, disability, religious or political beliefs or sexual orientation.

C. Adequacy of Resources

Faculty/Staff – There will be no need for additional faculty time for teaching because all required courses for the certificate program are currently offered for other active degree programs. Faculty time is allocated to recruit students, monitor student progress, and administer the program efficiently. The department of Environmental, Agricultural, and Occupational Health has appropriate existing resources to manage the addition of this certificate.

Program Administration – The program will be administered by the Department of Environmental, Agricultural, and Occupational Health Graduate Program Director along with support from the COPH Office of Educational Services. Faculty from the Department of Environmental, Agricultural, and Occupational Health will serve as faculty advisors to students.

Library – All resource materials are currently cataloged with the UNMC’s McGoogan library and are easily accessible to all students.

Physical Facilities – There will be no need for an additional physical facility to offer this program. COPH and the UNMC existing facilities will be sufficient.

Instructional Equipment – No additional equipment is necessary for the proposed program.

Budget Projections – Budget requirements for the program will consist of additional faculty time for recruitment, advising and mentoring. General operating expenses include communications and marketing. With regard to tuition, the usual COPH tuition rates and fees will apply.

Admission and Awarding of the Certificate

To be eligible for admission to the course, an applicant must have completed the following prerequisites:

- Completion of the SOPHAS Express Public Health application and submission of the application fee.
- Official transcripts reflecting an earned bachelor's degree, with a 3.0 or higher grade point average for the last 60 undergraduate or the last 18 graduate/post-baccalaureate credit hours completed.
 - Completion of at least two semesters of biology, two semesters of chemistry, one semester of physics, and one semester of college level math.
- Two letters of recommendation from academic or professional references
- A one-page resume/cv
- A one-page personal statement describing the applicant's interest in and potential for contributing to the field of occupational health and career objectives
- All applicants whose primary language is not English or whose undergraduate degree is from a college or university outside of the United States are required to submit official Test of English as a Foreign Language (TOEFL) scores.

Students are encouraged to meet with the Graduate Studies Director to discuss their professional trajectory and select the appropriate courses to achieve their goals.

Application Deadline - Fall semester admission – July 1 for domestic students and April 1 for international students. Spring semester admission – November 1 for domestic students and September 1 for international students.

Number of Students Anticipated - The program anticipates admitting 5-10 students each semester for the initial year with admission taking place in both the Fall and Spring. The program anticipates that once established approximately 10-15 students will be enrolled in the program at any given time.

Awarding of the Certificate - Completion of 12 credits of prescribed course work with a minimum 3.0 GPA.

Counting Credits toward Certificate and Degree Programs

Students earning credits for one or more certificates who are later accepted into a COPH degree program may apply their certificate credits to the extent that they are applicable for that degree. Any limit on internal transfer credits applicable to the degree shall apply.

D. Avoidance of Unnecessary Duplication

There are no certificate programs in Nebraska or neighboring states specially designed for health and safety professionals in industry. The University of Iowa has a graduate certificate in Agricultural Health and Safety. This 4-course (12 credit hour) program is designed for students interested in treating and preventing farm-related illnesses and injuries. Our proposed program includes courses in noise and hearing loss, ergonomics, and thermal stress, with a focus on industrial applications.

E. Consistency with the Comprehensive Statewide Plan for Postsecondary Education

This proposal is consistent with the goals of the Nebraska Comprehensive Plan for Postsecondary Education as follows:

Section 1-8 – Meeting the needs of the State: This certificate will be responsive to the workforce development and ongoing training needs of employers and industries to build and sustain a knowledgeable, trained, and skilled workforce in both rural and urban areas of the state.

Section 2.14 – Skilled Graduates: This certificate program will provide graduates with the Skills, knowledge, and confidence needed to succeed as capable employees.

Section 3.1 – Workforce Development: This certificate is responsive to the workforce development and ongoing training needs of employers and industries to help sustain a knowledgeable, trained, and skilled workforce in both rural and urban areas of the state.

Section 3-7 – Serving Citizens: This certificate will train and impart new skills for technicians and professionals in the future. It will bolster creative, intelligent citizens who can generate new ideas, adapt to new technologies, analyze issues, solve problems, and utilize lifelong learning opportunities.

NEBRASKA

Good Life. Great Mission.

DEPT. OF HEALTH AND HUMAN SERVICES



Pete Ricketts, Governor

9/18/2019

Chandran Achutan, PhD, CIH
Associate Professor & Graduate Studies Director
Department of Environmental, Agricultural, and Occupational Health
UNMC College of Public Health
984388 Nebraska Medical Center
Omaha, NE 68198-4388

Dear Dr. Achutan,

Thank you for your efforts in developing a Certificate Program in Occupational Safety and Health at the University of Nebraska Medical Center. This program is needed in Nebraska to reduce work-related injuries and illness.

In 2017, there were 35 occupational fatalities in Nebraska, and the rate of illness per 10,000 full-time workers was 23.3. These numbers are likely underestimates the actual rates of fatalities and injuries. In addition, data shows agriculture is one of the most hazardous sectors, and farmers are at high risk for hearing loss, musculoskeletal disorders, and other injuries and illnesses.

As a potential employer, DHHS is interested in developing careers of aspiring occupational health and safety professionals. We would be happy to explore capstone and hands-on activities for your students.

Sincerely,

A handwritten signature in blue ink, appearing to read "Derry Stover".

Derry Stover, MPH
Epidemiologist
Occupational Health Surveillance Program



Valmont Industries, Inc.
28800 Ida Street Valley, Nebraska 68064 USA
402-359-6119 Fax 402-359-4470 valmont.com

September 16, 2019

Chandran Achutan, PhD, CIH
Associate Professor & Graduate Studies Director
Department of Environmental, Agricultural, and Occupational Health
UNMC College of Public Health
984388 Nebraska Medical Center
Omaha, NE 68198-4388

Dear Dr. Achutan,

I am writing this letter in support of your effort to develop and offer a certificate program in occupational safety and health at the University of Nebraska Medical Center. I believe this certificate will develop the skill sets of occupational health and safety technicians who are new to the field and occupational safety and health specialists who may want refresher courses before sitting for the CIH or CSP exams.

I am excited to see the College of Public Health expand program offerings in occupational health and safety. I am willing to speak to your students about health and safety careers, internship opportunities, and provide tours at our manufacturing facilities.

Thank you,

A handwritten signature in black ink, appearing to read "Scott Shook", with a horizontal line extending to the right.

Scott Shook
Corporate Director of Health & Safety

**TABLE 1: PROJECTED EXPENSES - NEW INSTRUCTIONAL PROGRAM
UNMC Occupational Safety and Health Professional Certificate**

	(FY2019-20) Year 1		(FY2020-21) Year 2		(FY2021-22) Year 3		(FY2022-23) Year 4		(FY2023-24) Year 5		Total Cost
	FTE	Cost	FTE	Cost	FTE	Cost	FTE	Cost	FTE	Cost	
Personnel											
Faculty ¹	0.10	\$14,821	0.10	\$15,265	0.10	\$15,723	0.10	\$16,195	0.10	\$16,681	\$78,684
Professional ²	0.05	\$2,350	0.05	\$2,421	0.05	\$2,493	0.05	\$2,568	0.05	\$2,645	\$12,476
Graduate Assistants											
Support Staff											
Subtotal	0.15	\$17,171	0.15	\$17,686	0.15	\$18,216	0.15	\$18,763	0.15	\$19,326	\$91,161
Operating											
Operating and Supplies ³		\$2,500		\$2,500		\$2,500		\$2,500		\$2,500	\$12,500
Equipment											
Library/Information Resources											
Subtotal		\$2,500		\$2,500		\$2,500		\$2,500		\$2,500	\$12,500
Total Expenses		\$19,671		\$20,186		\$20,716		\$21,263		\$21,826	\$103,661

¹ 12 credit hours for the certificate; these courses already are being taught, and so the calculation is based on proportion of students in the certificate program.

² Student Services time.

³ Includes communications and marketing.

**TABLE 2: PROJECTED REVENUES - NEW INSTRUCTIONAL PROGRAM
UNMC Occupational Safety and Health Professional Certificate**

	(FY2019-20) Year 1		(FY2020-21) Year 2		(FY2021-22) Year 3		(FY2022-23) Year 4		(FY2023-24) Year 5		Total
	FTE	Revenue	FTE	Revenue	FTE	Revenue	FTE	Revenue	FTE	Revenue	
Reallocation of Existing Funds											
Required New Public Funds											
1. State Funds											
2. Local Tax Funds (community colleges)											
Tuition and Fees ¹		\$11,723		\$19,538		\$19,538		\$39,075		\$39,075	\$128,948
Other Funding											
Total Revenue		\$11,723		\$19,538		\$19,538		\$39,075		\$39,075	\$128,948

¹ Tuition rate = \$580; fees per credit hour = \$71.25; hours taken per academic year per student = 6.

	Students Enrolled	Tuition Revenue Per Year	Fees Revenue Per Year	Total Revenue Per Year
Year One	3	\$10,440	\$1,283	\$11,723
Year Two	5	\$17,400	\$2,138	\$19,538
Year Three	5	\$17,400	\$2,138	\$19,538
Year Four	10	\$34,800	\$4,275	\$39,075
Year Five	10	\$34,800	\$4,275	\$39,075