Allied Health (AH)

Interim Head of Department: Professor Nancy Bull Department Office: Room 227-A, Koons Hall

For major requirements see the College of Agriculture, Health and Natural Resources, Department of Allied Health Sciences section of this *Catalog*.

For course descriptions of Allied Health Sciences, see these topics listed alphabetically throughout this *Directory of Courses*:

Allied Health (AH) Diagnostic Genetic Sciences (DGS) Dietetics (DIET) Health Sciences (HESC) Medical Laboratory Sciences (MLSC)

1030. Interdisciplinary Approach to Obesity Prevention

(Also offered as NUSC 1030.) Three credits. Prerequisite: Open to freshmen and sophomores in the Honors Program. Explores the biology of obesity including genetic predispositions and behaviors that increase obesity risk (dietary, physical activity, social, psychological), the obesigenic environment, including how communities are physically built, as well as the economic relationship to obesity risk, and policy and ethical implications for obesity prevention. Multi-level obesity prevention approaches that involve the individual, family, organization, community, and policy. CA 3.

1095. Special Topics Lecture

(195) Credits, prerequisites, and hours as determined by the Senate Curricula and Courses Committee. May be repeated for credit with a change in topic.

1100. Introduction to Allied Health Professions

(100)-One credit. Lecture.

Overview of health professions, team approach to health care delivery.

1200. Introduction to the Martial Arts

One credit. This course may be repeated with a change of activity and/or skill level; not to exceed 3 credits toward graduation of combined AH 1200 and EKIN KINS 1160.

Introduction to the techniques and philosophies of traditional Martial Arts disciplines. Development of practical martial arts skills (varies by discipline), and building of a state of mind which permits the successful application of self-defense.

2000. Fundamentals of Allied Health Care

Three credits. Prerequisite: Open only to sophomore and above students in Allied Health Sciences, Diagnostic Genetic Sciences, and Medical Laboratory Sciences; others by consent. Not open to students who have passed NURS 1130.

An introduction to the basics of the health care system and the role of Allied Health professionals within this system. Topics include ethical and legal responsibility, professionalism, communication, delivery systems, insurance and government providers.

2001. Medical Terminology

One credit. Prerequisite: Open to students in the Department of Allied Health Sciences and Health Systems Management majors, others by instructor consent.

Introduction and mastery of medical terminology through presentation of word roots, prefixes and suffixes.

2093. International Study in Allied Health

Variable credit (1-6). Hours by arrangement. Prerequisite: Department Head consent required prior to study abroad. May be repeated for credit; may count up to 6 credits toward the major with consent of advisor and Department Head. Students may only count a maximum combined credit total of 6 credits toward the Allied Health major of International Study, Independent Study and Internship credits. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory).

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Commented [HM2]: Senate approval required; CAHNR 3/6/15 Courses taken in Allied Health and related areas as part of an approved Study AbroadEducation Abroad Program.

2330. Italy's Mediterranean Food and Our Health

Three credits. May not be counted toward the Allied Health Sciences major's group A or science elective requirements.

Production and processing of the characteristic foods of Italy. Summary of the Italian Mediterranean diet: definitions, culture, history, food consumption patterns, nutrient composition and potential health benefits. Emphasis on the difference in diet between Italians and Americans in relation to the health differences between the two populations. CA 4-INT.

3000. U.S. Healthcare Systems and Professional Practice

Three credits. Prerequisite: Open only to Allied Health Sciences majors juniors and higher; others by consent. Not open to students who have passed NURS 1130 or AH 2000.

Essentials of the U.S. healthcare system, its history to present day structure including the role of the government and delivery systems; patient, ethical and legal responsibility; financing and reimbursement structures; and Allied Health professionals' practice within the system.

3005. Biostatistics for Health Professions

(Also offered as STAT 3005.) Three credits. Prerequisite: A course in pre-calculus or higher; STAT 1000Q or 1100Q or higher; open to CAHNR students and Statistics majors, juniors or higher; others with instructor consent. Not open for credit to students who have passed STAT 4625.

Introduction to biostatistical techniques, concepts, and reasoning using a broad range of biomedical and public health related scenarios. Specific topics include description of data, statistical hypothesis testing and its application to group comparisons, and tools for modeling different type of data, including categorical, and time-event, data. Emphasis on the distinction of these methods, their implementation using statistical software, and the interpretation of results applied to health sciences research questions and variables.

3020. The Basics: Molecular Technologies

Two credits. One 1-hour lecture and one 3-hour laboratory. Prerequisite: BIOL 1107; open only to students in the Agricultural Biotechnology minor sophomore level or higher; others with instructor consent. *Anamani*

Laboratory course in which students will isolate DNA and RNA from cells and bacteria, manipulate nucleic acids by restriction enzyme digestion and electrophoresis, and will perform blotting techniques and polymerase chain reaction.

3021. Environment, Genetics and Cancer

(221) (Formerly offered as ANSC 221.) Three credits. Prerequisite: BIOL 1107; CHEM 2241 or 2443; open to Environmental Sciences and Allied Health Sciences majors, others with instructor consent; open to juniors or higher. Concurrent enrollment in one of the following is strongly recommended: MCB 2000, 2410, 2413 or 2210, 3010.

Basic principles in tumor biology will be presented including the biochemical basis of cell transformation, proliferation, and metastasis. Molecular mechanisms by which environmental chemicals interact with DNA and other cellular components will be discussed. The role of proto-oncogenes, tumor suppressor genes, and their products will be covered. Biological markers of cancer risk and exposure will be included.

3091. Allied Health Sciences Internship

(291)-Variable (1-6) credits. Hours by arrangement. Prerequisite: Open to juniors or higher; open to Department of Allied Health Sciences students with consent of advisor and department head. May be repeated for credit with a maximum of 6 credits applied to the major. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory). Students may only count a maximum combined credit total of 6 credits toward the Allied Health major of International Study, Independent Study and Internship credits.

Provides Allied Health students actual work experience in their area of concentration. Students work with professionals in their concentration to meet objectives consistent with their major. A fee of \$17 is charged for this course.

3099. Independent Study in Allied Health

(299) Credits and hours by arrangement, not to exceed four. Prerequisite: Open only with consent of instructor, advisor and department head. May be repeated for credit. Students may only count a maximum combined credit total of 6 credits toward the Allied Health major of International Study, Independent Study and Internship credits.

Individualized study in a specialized area in the field of allied health.

3101. Health and Wellness for Life

Three credits. Prerequisite: BIOL 1103 or 1107 or equivalent; open only to Allied Health Sciences majors junior or

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higher; all others by instructor consent. Not open to students who have passed AH 1201.

Wellness, holistic health, mind-body connection, health and wellness models, mental wellness, positive self-concept, preventing heart disease and cancer, licit and illicit drugs, stress management, diet, nutrition, weight control, aerobic and anaerobic exercise, healthy lifestyle behaviors, applications to life. All students are required to participate in at least one Community Based Outreach Engagement Program.

3121. Immunology for the Medical Laboratory Sciences

(Formerly offered as MLS 3121.) Three credits. Three hours of lecture. Prerequisite: MLSC 3130 or MCB 2610 which may be taken concurrently; open to students in the following majors: Allied Health Sciences, Diagnostic Genetic Sciences, and Medical Laboratory Sciences; open to juniors or higher.

Mechanisms of innate and acquired immunity, antigen-antibody interactions, function of the human immune system in normal and diseased states.

3133. Cancer and Your Health

(220) (Formerly offered as CYTO 220.) Three credits. Three hours of lecture. Prerequisite: One course in Biology or concurrent enrollment in a Biology course; open only to Allied Health Sciences majors; open to juniors or higher; others by instructor consent.

Introduces cancer risk reduction education, causes, early detection methods, prevention, and public education.

3173. Psychology of Workplace Safety

(Also offered as OSH 3173.) Three credits. Prerequisite: Open only to BGS students and Allied Health Sciences. OSH OEHS concentration majors juniors or higher, and OSH Certificate students; others with consent. Recommended preparation: One 1000-level or above psychology course.

Knowledge of the human factors and behaviors that have an impact upon the safety performance of employees in the workplace, and intervention strategies to improve individual and organizational safety performance.

3174. Environmental Laws, Regulations and Issues

(Also offered as OSH 3174.) Three credits. Prerequisite: Open only to BGS students and Allied Health Sciences OEHS concentration majors juniors or higher; others with consent.

Overview of the history and framework of federal environmental legislation to protect the environment along with environmental issues, laws and regulations associated with industrial operations.

3175. Environmental Health

(226) (Formerly offered as ANSC 226.) Three credits. Prerequisite: BIOL 1102 or equivalent; CHEM 1122 or equivalent; open to Allied Health Sciences majors, BGS students, Environmental Sciences, Environmental Studies and Engineering majors, others with instructor consent; open to juniors or higher. Recommended preparation: a course in animal anatomy and physiology. *Silbart*

Course will focus on the environmental health consequences of exposure to toxic chemicals, food contaminants and radiation. Basic principles of toxicology will be discussed, followed by lectures on specific topics such as: cancer, occupational hazards, radiation, genetic biomonitoring, risk assessment techniques, risk/benefit analysis, social/legal aspects of regulating toxic chemicals, and other related topics.

3203. Aging: Implications for Health Professionals

(203) Three credits. Three hours of lecture. Prerequisite: Open to Allied Health Sciences majors, others with instructor consent; open to juniors or higher. Course requirements include student participation in a health education field work experience off-campus.

Age-related physiological changes and pathologies, psychological function in health behaviors and care, role change and transition, health care issues, therapeutic relationships.

3231. Program Planning for Health Promotion

(231) Three credits. Three hours of lecture. Prerequisite: Open only to Health Promotion students; others by consent; open to juniors or higher.

Presents meaningful and constructive tools, methods and techniques for Health Care practitioners to plan, develop and deliver community based (outreach) Health Promotion programs which would provide opportunities to improve the quality of life as well as the quantity.

3234. Fitness for Health

(208)-Three credits. Prerequisite: Open only to Allied Health Sciences majors; others with instructor consent; open to

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juniors or higher.

Emphasizes preventative health practices, which promote healthful lifestyles and reduce risk factors associated with disease. Designed to provide theory and concepts related to the development and maintenance of physical fitness, general health and performance.

3237. Women's Health and Health Care

(237) Three credits.

(237) Three credits. Exploration of topics in women's health from a holistic interdisciplinary perspective. Consumer and provider	
focused.	Commented [mwh8]: 5-YR
270. Fire and Security Management	
(Also offered as OSH 3270.) Three credits. Prerequisite: Open only to BGS students and Allied Health Sciences-OSH <u>-OEHS</u> concentration majors juniors or higher, and OSH Certificate students; others with consent. Comprehensive overview of fire and security management in an occupational setting. Topics include principles of fire and security protection, the development of fire and security management systems to protect people and property, the application of measures to prevent fires and security breaches, the review of governmental and professional agencies and their roles, life safety for building occupants, crisis management, current risks and threats, and teaming to maximize fire safety, security and crisis response.	Commented [mwh9]: CAHNR 10/17/14
3275. HAZWOPER	
(285) Three credits. Prerequisite: Open only to Allied Health Sciences majors, Environmental Sciences majors, Environmental Engineering majors, and students in the Occupational Safety and Health program, and OSH Certificate students, others with instructor consent; open to juniors or higher. Provides individuals the necessary knowledge and training to meet the criteria for certification recognized by the Occupational Safety and Health Administration (OSHA) in work activities related to hazardous waste sites and cleanup operations involving hazardous substances. Mandatory off-site field exercise required.	Commented [mwh10]: CAHNR 10/17/14
3277W. Hazardous Chemicals	
 (Also offered as OSH 3277W.) Three credits. Prerequisite: ENGL 1010 or 1011 or 2011; open to BGS students and Allied Health Sciences OSH concentration majors juniors or higher; others with consent of instructor. Hazardous chemicals and their use in the workplaces, their effects on the environment, and the hazards caused by exposure to them. 3278. Workers' Compensation Law and Related Issues (Also offered as OSH 3278.) Three credits. Prerequisite: Open only to BGS students and Allied Health Sciences-OSH 	Commented [mwh11]: 5-YR
<u>-OEHS</u> concentration majors juniors or higher and <u>OSH Certificate students</u> ; others with consent. Knowledge of state and federal workers' compensation laws, and the interrelationship of these laws with other laws; laws governing workplace injuries and practical considerations for handling of claims.	Commented [mwh12]: CAHNR 10/17/14
3501. Diagnostic Techniques for the Biomedical Sciences	
(260)-(Also offered as PVS 3501.) Two credits. One 1-hour lecture and one 3-hour laboratory. Prerequisite: Open to juniors or higher; instructor consent required; open only to students who have declared the Agricultural Biotechnology minor and passed MCB 3414. Recommended preparation: MCB 2000. <i>Anamani, Frasca, Lipcius, Risatti</i> Theoretical basis and practical exposure to modern laboratory methods used in the biomedical sciences for disease diagnosis.	
3570. Health and Safety Management in the Workplace	
(Also offered as OSH 3570.) Three credits. Students who have passed either AH 280 or 282 will receive only 2 credits toward graduation. Prerequisite: Open only to BGS students and Allied Health Sciences-OSH-OEHS concentration majors juniors or higher and OSH Certificate students; others with consent. Not open for credit to students who have passed both AH 280 and 282. Knowledge and skills necessary to develop a sustainable occupational health and safety management program in the workplace toward the goal of preventing illness and injury, and property damage.	Commented [mwh13]: CAHNR 10/17/14
3571. Health Hazards in the Workplace	
(281)-(Formerly offered as AH 3271.) (Also offered as OSH 3571.) Three credits. Prerequisite: Open only to BGS students and Allied Health Sciences-OSH_OEHS concentration majors juniors or higher, and OSH Certificate students; others with consent. Recommended preparation: AH 2001.	Commented [mwh14]: CAHNR 10/17/14

Anticipation, recognition, evaluation, control, and communication of health hazards in the workplace.

3573. Health and Safety Standards in the Workplace

(283) (Formerly offered as AH 3273.) (Also offered as OSH 3573.) Three credits. Prerequisite: Open only to BGS students and Allied Health Sciences OSH_OEHS concentration majors juniors or higher, and OSH Certificate students; others with consent.

Comprehensive overview of workplace health and safety regulatory processes and standards.

3574. Ergonomics

(284) (Formerly offered as AH 3274.) (Also offered as OSH 3574.) Three credits. Prerequisite: Open only to BGS students and Allied Health Sciences juniors or higher, and OSH Certificate students; others with consent. Knowledge and skills for achieving optimal relationships between humans and their work environment.

4092. EMT Training

Four credits. Prerequisite: Instructor consent required

Instruction in basic life support skills, treatment of bleeding control and shock recognition, care for trauma victims, medical emergencies. Supervised practice experience and hands-on instruction of theory. Includes a 10 hour observation experience outside of classroom instruction. Meets the performance requirements of the National Registry of Emergency Medical Technicians (NREMT) certification exam. Students must first register for Hartford Hospital's EMT training program (separate Hartford Hospital program costs apply).

4093. International Study in Allied Health

Variable (1 - 6) credits. Hours by arrangement. Prerequisite: Department Head consent required prior to study abroad. Students may only count a maximum combined credit total of 6 credits toward the Allied Health major of International Study, Independent Study and Internship credits. May be repeated for credit; may count up to 6 credits toward major with consent of advisor and Department Head. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory).

Courses taken in Allied Health and related areas as part of an approved <u>Study AbroadEducation Abroad</u> Program.

4095. Special Topics

(298) Credits and hours by arrangement. Prerequisite: Open only with consent of instructor. May be repeated for credit. Investigation of a special topic in allied health related to the basic core or interdisciplinary areas.

4221W. Trends in Environmental and Occupational Safety and Health

(Also offered as OSH 4221W) Three credits. Prerequisite: AH 3570 or OSH 3570; ENGL 1010 or 1011 or 2011; open to BGS students and Allied Health Sciences <u>OEHS</u> concentration majors juniors or higher; others with consent of instructor.

Impact of issues in the workplace in promoting prevention of injuries and illness to workers, and protection of property and the environment.

4225. Genetic Testing and Genomic Medicine

Three credits. Prerequisite: BIOL 1107 and MCB 2400 or 2410; open to juniors or higher.

Genetic testing and genome analyses with emphasis on topics relating to the clinical laboratories and to the diagnosis and treatment of human disease. Scientific and clinical aspects of genetics and genomics in health care integrated with case presentations, current literature, and discussions.

4239. Research Methods in Allied Health

Two credits. Two hours of lecture. Prerequisite: A course in statistics; open only to Allied Health Sciences majors; others with instructor consent; open to juniors or higher. Corequisite: AH 4240W. Not open for credit to students who have passed AH 4241.

Research questions/hypothesis, finding and using research literature, ethical considerations, research design, sampling, measurement, reliability and validity, descriptive and inferential statistics, computer analysis of data, evaluating research, reviews of literature and proposals.

4240W. Writing for Allied Health Research

One credit. One hour of lecture/discussion. Prerequisite: ENGL 1010 or 1011 or 2011; a course in statistics; open only to Allied Health Sciences majors; others with consent of instructor; open to juniors or higher. Corequisite: AH 4239. Not open to students who have passed AH 4241W.

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Develop scientific writing skills through completing a scientific research proposal.

4241. Research for the Health Professional

(241)-Two credits. Two hours of lecture. Prerequisite: A course in statistics, open only to Allied Health Sciences/ OSHOEHS_-concentration majors, Dietetics, Diagnostic Genetic Sciences and Medical Laboratory Sciences majors; others with consent of instructor; open to juniors or higher. Not open to students who have passed AH 4239.

Research questions/hypothesis, finding and using research literature, ethical considerations, research design, sampling, measurement, reliability and validity, descriptive and inferential statistics, computer analysis of data, evaluating research, reviews of literature and proposals.

4242. Counseling and Teaching for the Health Professional

(242) Three credits. Three hours of lecture. Prerequisite: Open to Allied Health Sciences, Dietetics, Medical Laboratory Sciences, Diagnostic Genetic Sciences and Nutritional Sciences majors, others with consent of instructor; open to juniors or higher.

Learning theory and counseling strategies; role of health professional as teacher and counselor; communicating with special groups, individuals and groups.

4243. Health Care Issues for the Health Professional Current Issues in Health

(243) Three credits. Prerequisite: Open to Allied Health Sciences, Dietetics, Medical Laboratory Sciences, Diagnostic Genetic Sciences and Nutritional Sciences and Health Systems Management majors, others with consent of instructor; open to juniors or higher.

Individual, community and institutional health care needs and issues from a bio-medical and socio-cultural point of view. Health and its relationship to genetics, poverty, ethnicity, life-cycle events, ethics, etc.

4244. Management for the Health Professional

(244) Three credits. Three hours of lecture. Prerequisite: Open to Allied Health Sciences, Dietetics, Medical Laboratory Sciences, Diagnostic Genetic Sciences and Nutritional Sciences majors, others with consent of instructor; open to juniors or higher.

Basic management principles and concepts of planning, organizing, supervising, controlling and evaluating in health care environments. Leadership, motivation, supervision, time management, labor relations, quality assurance/proficiency, financial management.

4291. OSH Internship

(Also offered as OSH 4291.) Variable (1-6) credits. Hours by arrangement. Prerequisite: Open only to BGS students and Allied Health Sciences <u>OSH_OEHS</u> concentration majors juniors or higher with consent of advisor and <u>OSH_OEHS</u> program coordinator. May be repeated for credit to a maximum of 6 credits applied to the major. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory).

Application of the principles and concepts of hazard assessment and safety management to an actual workplace under the supervision of an approved onsite supervisor.

4297W. Honors Thesis in Allied Health Sciences

Three credits. Prerequisite: ENGL 1010 or 1011 or 2011; instructor consent required; open only to Department of Allied Health Sciences students, juniors or higher.

Completion of written thesis based on student-designed honors research project under supervision of a faculty advisor.

4503. Poverty and Public Health

Three credits. Taught jointly with GPAH 5503. Prerequisite: Open to juniors or higher.

Social determinants of health and poverty. Health impact assessments. Improving the social determinants of health and poverty, including countries in conflict.

4570. Pollution Control, Prevention and Environmental Management Systems

(Also offered as OSH 4570.) Three credits. Prerequisite: AH OSH 3174; open only to BGS students and Allied Health Sciences OSH OEHS concentration majors juniors or higher; others with consent.

Basic knowledge of environmental management systems, and techniques in controlling and preventing pollution from industrial activities.

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