GRPH/ART 375. Letterpress. 3 credits.
This studio course offers students an opportunity to engage in the process and product of letterpress printing through various techniques and conceptual approaches. Instruction focuses on text and image relationships by integrating metal and wood type, and other type-high surfaces. Emphasis will be placed on the acquisition of skills and vocabulary and the creative use of type. The course will address the history of letterpress and its contribution to contemporary art and design. Prerequisite: ART 276; Also for GRPH credit: GRPH 208.

GRPH/ART 376. Intermediate Book Arts: Concept, Content, Form. 3 credits.
This course challenges the student to develop a limited edition hand-made artists' book. The appropriate format for each individual's concepts are identified, adapted, customized, applied, and produced. Content development, book design, integration of various media, and the functionality of various bookmarking materials are explored. We will consider the artists' book as a sculptural form and locate it within the broader context of contemporary writing and visual art. Prerequisites: ART 276; ENG 391, ENG 392 or ENG 393. Also for GRPH credit: GRPH 306.

Independent activity at the intermediate level, such as research or studio practice, under faculty supervision. Projected studies in any area of the school's offering must be arranged with the instructors who will direct them. Offered only with the consent of the instructor. Prerequisite: GRPH 208.

GRPH 392. Topics in Graphic Design. 3 credits. Offerings vary.
Study of selected topics in graphic design at the intermediate level. May be repeated when course content changes. See MyMadison for current topics. Prerequisite: GRPH 208.

GRPH 406. Advanced Typography (0, 9). 3 credits.
An advanced study of typography for its aesthetic and communicative value. Topics of research, narrative, information design, format organization and production techniques will be explored. Solutions reflect advanced text and image integration knowledge through complex and variable structure development. Prerequisite: GRPH 306.

GRPH 408. Brand Identity. 3 credits.
Exploration of visual identities utilizing a holistic, systems approach to design. Introduces business strategies and design techniques associated with brand development. Emphasis is placed on methods of thinking, research and implementation. Prerequisite or corequisite: GRPH 406.

GRPH 410. Graphic Design Portfolio. 3 credits.
An examination of the business of graphic design, employment strategies and freelance opportunities. Focus is placed on solidification of the portfolio for employment and/or graduate school. This course is strongly recommended for the last semester prior to graduation. Prerequisite: GRPH 408. Prerequisite or corequisite: GRPH 408.

Independent activity, such as research or studio practice, under faculty supervision. Projected studies in any area of the school's offering must be arranged with the instructor who will direct them. Offered only with consent of the director. Prerequisite: GRPH 208.

GRPH 491. Studio Assistant. 1-3 credits, repeatable. Offerings vary.
An on-campus program monitored on an individual basis designed to provide practical studio experience in the visual arts. Students will learn safe studio practices and management skills, including material use, inventory control, and the proper operation of equipment found within various individual classroom studios. Prerequisite: Permission of the instructor.

GRPH 492. Topics in Graphic Design. 3 credits. Offerings vary.
Study of selected topics in graphic design at the advanced level. May be repeated when course content changes. See MyMadison for current topics. Prerequisite: GRPH 208.

GRPH 496. Internship in Graphic Design. 1-6 credits. Offered fall, spring and summer.
An off-campus program prepared and monitored on an individual basis. Internships are designed to provide practical experience in the arts. Prerequisites: Permission of the instructor and GRPH 208; students can only enroll for a maximum of 3 credits per Internship.

GRPH 499. Honors (1, 3, 2). 6 credits total for three semesters. Prerequisite: GRPH 208.

Greek

GRK 101. Elementary Greek I. 3-4 credits.
Designed to provide a reading knowledge of Classical Greek as well as New Testament koine. Greek life, thought and culture are stressed. Especially recommended for science, English and philosophy majors.

GRK 102. Elementary Greek II. 3-4 credits.
Designed to provide a reading knowledge of Classical Greek as well as New Testament koine. Greek life, thought and culture are stressed. Especially recommended for science, English and philosophy majors.

GRK 231. Intermediate Greek I. 3 credits each semester.
An intensive reading course. Selections from Classical Greek writers and/or the New Testament. Prerequisite: One year of college Greek or equivalent.

GRK 232. Intermediate Greek II. 3 credits.
An intensive reading course. Selections from Classical Greek writers and/or the New Testament. Prerequisite: GRK 231 or permission of the instructor.

Health

HTH 100. Personal Wellness. 3 credits. Offered fall, spring and summer.
Emphasizes lifestyle behaviors contributing to health promotion and disease prevention. General areas affecting health status are identified. Suggestions are made as to how health-related behaviors, self-care and individual decisions contribute to health and influence dimensions of wellness. May be used for general education credit.

HTH 150. Introduction to Health Sciences. 1 credit.
This course orients students in the major to foundational expectations and requirements for successful completion of the Health Science major and Health Studies concentration. The course introduces conceptual ideas such as a wide array of health careers, importance of gaining early and regular field experiences, and writing and research basics.

HTH 151. Foundations of the Health Sciences. 3 credits. Offered fall and spring.
Review of the basic competencies and foundations of the health sciences including academic planning, professionalism, writing and presentation skills, information literacy, foundational principles, and the roles and responsibilities of selected health science fields. This is intended to be the first course that a student takes in the health sciences major.

**HTH 204. Emergency Health Care (2, 2). 3 credits.
A survey of various dimensions of the legal aspects of emergency care, cardiopulmonary emergencies, hemorrhage control, wounds, shock, heat injuries and other health emergencies. Selected American Red Cross and American Heart Association certifications available.

** The American Red Cross registration fees apply.

HTH 206. Advanced Athletic Training. 3 credits.
This course involves advanced study of injuries associated with physically active individuals including injury mechanisms, signs and symptoms, and treatments. Other topics include relationships athletic trainers build with other health care professionals; environmental issues related to physical activity; and special needs of various populations. Prerequisites: BIO 290 and HTH 205.

HTH 210. Medical Terminology. 3 credits.
Study of terms that relate to body systems, anatomical structures, medical processes and procedures, and a variety of diseases/disorders that afflict human organisms.

HTH 230. Community Health. 3 credits. Offered fall and spring.
An introduction to community health including its foundations, the tools of community health such as epidemiology, community organization, disease control and health promotion. The course focuses on the populations, settings and special issues of community health. Prerequisite: HTH 100.

HTH 231. Population Health Determinants. 3 credits.
Many factors combine together to affect the health of individuals and communities. In an effort to advance public health, health professionals must be cognizant not only of behaviors which may compromise or promote health, but also the interaction of social and physical factors which impact health outcomes.

HTH 245. Foundations of Infectious Disease. 3 credits.
An overview of the incidence, prevalence, causation, and prevention of the major infectious diseases which are currently of concern in the twenty-first century. Major signs and symptoms of the diseases as well as treatment will be reviewed. The course will also cover the body's defense system and the principles of disease occurrence.

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HTH 252. Sexually Related Diseases. 1 credit. Sexually transmitted diseases and other sexual systems problems (breast and testicular cancer), nonvenereal diseases, chromosomal anomalies, sexual disorders of the genitalia and urinary system problems.

HTH 270. Personal Health Promotion. 3 credits. A survey of principles for the promotion of optimum individual, family and community health through intelligent self-direction of health behavior. Topics include the physical, mental and social dimension of health economics, disease control, human sexuality, chemical abuse, injury control, and nutrition.

HTH 278. Alcohol: Use and Abuse. 1 credit. Survey of the drug alcohol. Topics include pharmacological effects, patterns of use, potential for abuse, treatment programs and prevention of alcohol abuse and alcoholism.

HTH 308. Physiological Responses to Human Movement. 3 credits. Offered spring. The purpose of this course is to present an overview of established and current knowledge of physiological responses to human movement as they relate to health and wellness. Prerequisite: BIO 290.

HTH/KIN 312. The Profession of Teaching Health & Physical Education. 2 credits. Introductory study of the roles of the teacher and the learner and the pedagogical content knowledge of health and physical education. An in-depth examination of the unique position and qualifications of the specialist in physical education and health. Systematic observations will occur. Prerequisite: Admission to teacher education.

HTH/HHS/NSG/SOWK 314. Rural Health: An Interdisciplinary Approach. 3 credits. Offered May. Students study, observe and participate in interdisciplinary assessment, planning and delivery of community-based primary health care in partnership with residents and agencies of a host rural county. Learning activities will emphasize rural culture, rural health care and interdisciplinary practice.

HTH 320. Statistical Methods for Health Science Research. 3 credits. Offered fall and spring. This course reviews statistical concepts and techniques with special reference to health science applications and issues. It also reinforces the logic of statistical decision making for health and medical research concerns. Prerequisite: MATH 220.

HTH 340. Chronic Disease and Disabilities. 3 credits. Offered fall and spring. An overview of the incidence, prevalence, causation, and prevention of chronic diseases and disabilities across the lifespan. Major signs and symptoms of the diseases and disabilities as well as treatment will be reviewed. Prerequisites: HTH 100, HTH 150, HTH 210 or HTH 230, HTH 300 or HTH 231, HTH 245.

HTH 351. Health Behavior Change. 3 credits. Offered fall and spring. This course will identify individual and group characteristics that influence health behaviors and the features of programs designed to change behavior that makes them more or less effective. Students will develop the skills necessary to formulate health-modification programs. Prerequisites: HTH 100, HTH 150, HTH 245 or junior status.

HTH 352. Environmental Health. 3 credits. Offered fall and spring. An investigation of environmental factors and their effects on the health of the individual, community and society. Prerequisite: HTH 230.

HTH 354. U.S. and Global Health Care Systems. 3 credits. Offered fall and spring. The course provides an overview of the U.S. health care system by examining the organization, financing, and delivery of health services. The class will include current issues in health care policy, the future of health care systems in America, and a comparative global analysis of health care systems.

HTH 355. HIV/AIDS: A Global Perspective. 1 credit. Discussion includes theories of origins, statistics and characteristics of the causative pathogen, incubation, illness patterns, transmission, prevention and treatment of AIDS and other STDs. AIDS and other STDs in relation to prisons, children, schools, global concerns, health care systems and legal factors will be considered.

HTH 357. Coping with Stress. 1 credit. Offered fall. Identifying causes and personal symptoms associated with stress and individual methods of handling stress.

HTH 368. International Health and Nutrition Studies. 3 credits. This course involves participation with an interdisciplinary team which will travel outside of the United States to observe and experience the health care challenges in a developing nation.

HTH 370. Child and Adolescent Health. 3 credits. Offered fall and spring. This course will discuss the CDC priority health risk categories and the Healthy People 2010 Objectives for the Nation as they relate to child and adolescent health. In addition, the CDC model for Coordinated School Health Programs will be explored to determine specific strategies for health improvement. Prerequisite: HTH 230, restricted to PHETE or health sciences majors.

HTH 371. Behavior and Health of Children and Adolescents. 3 credits. Offered spring. This course will review the current health status and health risk behaviors of children and adolescents. It will focus on epidemiological trends and behavioral and social etiological factors. In addition, this course will include an overview of the theoretical approaches to children and adolescent health behavior. Application of theory will be made to the development of strategies for health promotion and interventions to reduce specific health problems for children and adolescents that would be appropriate for teachers and schools. Prerequisite: Admission to the PHETE program.

HTH 372. Human Sexuality. 3 credits. Offered fall and spring. An in-depth study of sexuality across the lifespan. Emphasis is placed on the development of sexuality with attention given to the psychological, physiological, ethical socio-cultural implications. Prerequisite: HTH 230.

HTH 375. Pregnancy Control and Abortion. 1 credit. An in-depth study of four areas concerning the following sexual aspects of living: contraception, abortion, sterilization and fertility-enhancing methods. The biochemical, physiological, legal, cultural and ethical aspects are considered.

HTH 378. Pregnancy Control and Abortion. 1 credit. Offered fall and spring. Study of contraceptive methods that makes them more or less effective. Students will develop the skills necessary to formulate health-modification programs. Prerequisite: MATH 220.

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HTH 409. Therapeutic Interaction. 3 credits. Offered summer.
This course focuses on the fundamental aspects of the therapeutic process, small group dynamics and understanding professional relationships in occupational therapy practice. Students will investigate concepts, attitudes and behavioral strategies that will support effective professional communication. They will also investigate inter- and intra- personal strategies that facilitate collaborative relationships as an occupational therapist in health or human service provision. Prerequisites: Admission into the occupational studies concentration and successful completion of all previous concentration course work.

HTH 420. Global Perspectives on Alcohol and Drug Policies. 3 credits. 
This course will study drug policy from a public health perspective. Students will examine global alcohol and other drug policies assessing their impact at the regional, state, national and international levels. Emphasis will be given to the contemporary phases of alcohol and other drug policies and the war on drugs.

HTH 423. Ethics and Critical Thinking in Health. 3 credits. Offered fall and spring.
This course will provide an overview of the leading health indicators and emerging health issues from the US Department of Health and Human Services. The course applies critical thinking and ethical reasoning skills and understanding of professional public health issues. Prerequisites: Previous course work in public health education concentration and successful completion of all previous concentration course work.

HTH 424. Occupational Development Through the Lifespan. 3 credits. Offered summer.
The fundamental aspect of occupational development that occurs throughout life is examined. Interactions between the individual and the environment across the several domains of occupation are explored. Acquisition of values, roles, habits, temporal adaptation and interests during each developmental stage are reviewed. Prerequisites: Admission to the occupational studies concentration and successful completion of all previous concentration course work.

HTH 431. Human Occupation and the Foundations of the Profession. 3 credits. Offered summer.
The relationship between human behavior and occupation is examined. Issues important to occupational engagement are explored and linked to occupational science and the occupational therapy profession. Prerequisites: Admission to the occupational studies concentration and successful completion of all previous concentration course work.

HTH 435. Level I Fieldwork One. 1 credit. Offered spring.
The course offers an opportunity to develop clinical skills in health and human service programs serving pediatric and adolescent clients. This experience will link knowledge and skills developed in didactic course work with a clinical environment. Prerequisites: Admission to the occupational studies concentration and successful completion of all previous concentration course work.

HTH 441/KIN 407. Rehabilitative Biomechanics. 3 credits. Offered fall and spring.
This course is designed to introduce the student to a variety of biomechanical concepts and applications as related to the health professions. Specific attention will be given to the biomechanical aspects of the musculoskeletal system. Prerequisite: BIO 290.

HTH 442. Chronic Diseases. 3 credits. Offered fall.
This course examines the pathophysiological effects of chronic diseases on health and well-being. Discussions include various strategies which improve the functional status and health of individuals at risk. Prerequisites: HTH 308 or KIN 302 and KIN 302L.

HTH 445. The Occupational Therapy Process. 3 credits. Offered summer.
The occupational therapy process is examined from assessing an occupational profile to focusing on engagement in occupation to achieve desired outcomes. Methods of assessment are studied as a definining step in the therapeutic process. Goal development, intervention strategies and documentation are also addressed. Prerequisites: Admission to the occupational studies concentration and successful completion of all previous concentration course work.

HTH 450. Epidemiology. 3 credits. Offered fall and spring.
A study of the causation and prevention of the major diseases that affect the quality of an individual's life. Practical skills utilized by practicing epidemiologists are emphasized. Prerequisites: HTH 320, HTH 330 or HTH 340, HTH 351 or senior public health education or senior health assessment and promotion concentration students or senior health services administration concentration students or junior pre-occupational therapy (OT) students applying to the JMU accelerated OT program.

HTH 453. Public Health Education Methods. 3 credits. Offered fall.
This course is designed for public health education students to develop competencies necessary for working in community and public health settings. Presentation skills, developing print, computer and Internet materials, facilitating groups and coalitions, and advocacy are some of the topics covered. Prerequisites: HTH 230, HTH 451 and senior public health education concentration students or permission of the instructor.

HTH 458. Health Program Planning and Evaluation. 3 credits. Offered fall and spring.
This lecture and laboratory course introduces students to principles and techniques employed to plan, implement and evaluate health promotion programs. Students will conduct a campus or community event and compile a formal report. Prerequisites: Public health education concentration and HTH 351 or health services administration majors and HSG 358 or senior substance abuse prevention minor.

HTH 460. Sensorimotor Foundations of Occupation. 3 credits. Offered spring.
The importance of sensory processing and motor response and the impact on behavior, movement and occupational engagement are examined. Normal and abnormal sensorimotor function is presented with specific emphasis on how dysfunction impacts upon performance in the domains of occupation. Prerequisites: Admission to the occupational studies concentration and successful completion of all previous concentration course work.

HTH 461. Therapeutic Media in Occupational Therapy. 2 credits. Offered fall.
This course examines the use of various forms of media used in occupational therapy practice. An understanding of the importance of media and its impact on the history and philosophical base of the profession will be addressed. The ability to grade and analyze activities relative to areas of occupation, performance skills, performance patterns, activity demands, context(s) and client factors in presented. A focus on developing the ability to adapt tasks for individuals who require a compensatory approach will be examined. Prerequisites: Admission to the occupational studies concentration and successful completion of all previous concentration course work.

HTH 470. Instructional Methods in Health Education. 4 credits. Offered spring.
An overview and application of methods for teaching health in the schools. Students will develop skills in planning, instructional methods and classroom management. Micro-teaching experiences and a practicum in the schools are incorporated into this course to provide for the application and practice of material and skills learned. Prerequisite: Admission into teacher education.

HTH 471. Health Aspects of Gerontology. 3 credits. Offered fall and spring.
Promotion of health in the aged, physiological aspects of the aging process: community, state and federal health programs, and services for the aged.

HTH 472. Family Life Education for Teachers. 2 credits. Offered summer.
This course will present an overview of issues affecting the sexual health of children and youth. A variety of family life education curricula will be discussed, however, the approved Virginia Department of Education curriculum will be examined and students will be trained in implementing and evaluating its various modules.

HTH 478. Occupational Dysfunction-Cause & Impact. 3 credits. Offered spring.
Various illnesses, injuries and circumstances that can impede areas of occupation and performance skills are examined. The practice framework detailed in the domain of occupational therapy will be applied to all reviewed conditions. Prerequisite: Admission to the occupational studies concentration.

HTH 479. Foundations of Research in Occupational Therapy. 3 credits. Offered spring.
This course will present an overview of the foundations of research application, interpretation and communication. A variety of research methods will be reviewed. Published research will be examined for relevance in clinical decision making. Prerequisites: Admission to the occupational studies concentration and successful completion of all previous concentration course work.

HTH 480. Health Assessment Techniques. 3 credits. Offered fall.
Examination of health risk appraisals and metabolic assessments used to implement strategies for behavioral change and improved overall wellness. Other topics include programming and group dynamics used to promote healthy lifestyle behaviors.
HSA 358. Health Administration. 3 credits. Offered fall.
This course provides an introduction to management functions, tasks and roles as they are carried out in health services organizations. Discussion of emerging issues affecting the management of health services organizations is provided. This course uses the case method of analysis to develop critical thinking skills. Prerequisite: HTH 354 or permission of the instructor.

HSA 360. Health Care Marketing. 3 credits. Offered fall.
This course introduces the role, functions and tasks of health care marketing. Attention is devoted to understanding basic marketing principles; using oral, written and visual electronic communications media; and developing marketing plans for health care organizations.

HSA 363. Health Economics. 3 credits. Offered fall.
This course explains how economic forces affect the health service sector and the health economics program can be used to assess and improve health industry performance. Efficiency and equity trade-offs are considered. Prerequisite: ECON 201 or equivalent and HTH 320.

HSA 365. Values in Health Care. 3 credits. Offered fall and spring.
This course provides an overview of health ethics and health law for students majoring in health sciences. Students will address the major principles facing a health service professional in the delivery of health services. Particular attention will be paid to development of methodologies for ethical decision-making. Prerequisite: HTH 354 or permission of the instructor.

HSA 367. Comparative International Health Systems. 3 credits. Offered every other year.
This course concentrates on various approaches used to provide public and personal health services around the world. Strengths and weaknesses of different health care systems in terms of availability, accessibility, cost effectiveness, continuity and quality of services will be considered. Prerequisite: HTH 354.

HSA 385. Health Services Administration Career Seminar. 1 credit. Offered fall and spring.
This course is a career development seminar for health services administration students. An array of health administrators from varied health care organizations helps expand students' understanding of the health administration field. This course is designed for junior-level students with an expectation of a major concentration in health services administration.

HSA 429. Hospital Organization and Administration. 3 credits. Offered spring.
This course examines the organization and operation of community hospitals in the U.S. Specific attention is devoted to management's role in internal operations and in external relationships with the community and other stakeholders. Discussion of emerging issues affecting the management of hospitals and hospital systems is provided. Prerequisites: HTH 354 and HSA 358 or permission of the instructor.

HSA 454. Internship in Health Organizations. 3 credits. Offered spring and summer.
Full-time directed field experience in a health organization. Opportunity provided to work in an appropriate setting. Student furnishes off-campus living and traveling expenses. Prerequisites: Permission of the instructor and a 2.5 GPA.

HSA 455. Long Term Care Organization and Administration. 3 credits. Offered fall.
This course provides an in-depth examination of the organization and administration of long term care programs: nursing homes, home health services, adult daycare, assisted living and hospice. This course is recommended for students planning careers in long term care. Prerequisites: HSA 290, HTH 354 and HSA 358 or permission of the instructor.

HSA 456. Ambulatory Care Services: Organization and Administration. 3 credits. Offered fall.
This course provides an in-depth examination of the staffing, organization, budgeting and administration of ambulatory services including medical group practices, community and hospital-based clinics, and ambulatory surgery centers. This course is recommended for students planning administrative careers in this area with a foundation in health services administration. Prerequisites: HTH 354, and HSA 358 or permission of the instructor.

HSA 458. Internships in Health Organizations. 3 credits. Offered spring.
Admission into the occupational studies concentration and successful completion of all previous concentration course work.

HSA 462. Managed Care. 3 credits. Offered spring.
The growing influence of managed health care on the organization and delivery of health services in the United States is addressed in this course. Structural and operational characteristics of managed care organizations and plans, including HMOs, POSs and other plans are explored, as are the implications of managed care plans for the management of hospitals and other health care organizations. Prerequisite: HTH 354 or permission of the instructor.

HSA 463. Quality Management in Health Care. 3 credits. Offered spring.
This course examines the quality management function required in diverse health care organizations. The student is exposed to definitions and standards of quality in health care, as well as to various tools used to measure, evaluate and improve quality. Emerging issues affecting the management of health care quality are discussed. Prerequisites: HTH 354 and HSA 358 or permission of the instructor.

HSA 464. Funding in Health Care. 3 credits. Offered spring.
General financial analysis is covered in terms of its application to health care entities. Concepts, issues and tools related to health care funding are covered. Prerequisites: COB 204, COB 241 or ACTG 244, FIN 345 and HTH 320.