Course Requirements for HBHS major:

1. NATURAL SCIENCES

Introductory biology, 8 cr [BIOG 1500 plus two introductory biology lectures]

Introductory chemistry, 8 cr [CHEM 2070-2080 or 2150-2160]

Physics, 4 cr [PHYS 1101 or 2207]. (PHYS 1102 or 2208 required for pre-medical and pre-physical therapy)

Organic chemistry lecture, 3-8 cr [CHEM 1570 (not for pre-med), 3530, 3570-3580, or 3590-3600]

Organic chemistry lab, 2-4 cr [CHEM 2510 or 3010]

Physiology, 3 cr [NS 3410 (3 cr) or BIOAP 3110 (3 cr)]

Biochemistry, 4-6 cr [NS 3200(4)], [BIOMG 3300(4)], [BIOMG 3310(3) + BIOMG 3320(2)], or [BIOMG 3310(3) + BIOMI 2900(3)], [BIOMG 3350(4)] or [BIOMG 3330 (4)] No additional credit for NS 3200 if the above biochemistry courses are taken to fulfill biochemistry requirement, and vice versa.

<u>Biology electives</u>, 6 additional <u>cr</u> selected from any <u>didactic</u> courses related to human biology in the following areas with 1 year of college biology as prerequisite (NS courses listed for biology electives may be counted toward required 43 HUMEC credits.) (No special studies (e.g., NS4000, 4010, or 4020) and no independent or research credits (e.g., NS 4990) may be used.

Genetics, recommended (including BIOMG 2800 or 2810) Microbiology (including BIOMI 2900, VETMI 4310)

Neurobiology (including BIONB 2210, 2220, 4280)

Cell Biology (including BIOMG 4320)

Evolution (including NS 2750 if it's not used as one of the HBHS Selectives)

Physiology (may use BIOAP 3110 only if NS 3410 is also taken) (including BIOAP 4890)

Biochemistry (other than the courses listed the above under biochemistry requirement) (e.g. NS 3310 if not used as one of HBHS Selectives)

Nutrition (may use NS 3220, 3420, 4310, 4315, 4370, 4410, 4444 - if these are not used as HBHS Selectives)

2. SOCIAL SCIENCES & HUMANITIES

Social Sciences: 6 cr. From the following four areas, choose 1 course from any 2 areas

Economics [ECON 1110* or ECON 1120*] **Anthropology** [ANTHR 1400]

Psychology [HD 1150* or HD 1170* or PSYCH 1101] **Sociology** [DSOC 1101 or SOC 1101]

<u>Humanities</u>: 3 cr. Recommended: Ethics, philosophy. Humanities Includes literature, history, philosophy, religion, and archaeology. Critical, historical, and theoretical studies of arts and design are included. Does not include language, creative, or performing arts (e.g. fiction or poetry writing, composing or performing music, acting, dancing, directing, or painting)

3. WRITTEN COMMUNICATIONS

FirstYear Writing Seminars: 6 cr (MUST BE COMPLETED DURING FIRST 2 SEMESTERS.)

4. QUANTITATIVE & ANALYTICAL

Calculus or Advanced math: 3-4 cr, MATH 1105, 1106, 1110, any higher level calculus, BTRY 1150, or AP BC score 3 or above.

Statistics: 4 cr, AEM 2100[4cr], BTRY 3010 [4cr], MATH 1710 [4cr], SOC 3010 [4], PSYCH 3500 [4], PAM 2100 [4], STSCI 2150, STSCI/ILRST 2100 [4]

One of them must be taken at Cornell unless you have earned a score of 3 or above on AP calculus BC.

AP AB score 3 or higher and AP statistics can be used once the above requirement is met.

5. Other Requirements in the Major

NS 1150: Nutrition, Health and Society [3 cr] AND

HBHS Selectives: total 15 credits from the list.

- 1. Social Science Perspective on Health (6 cr.): See attached list of course options on next page.
- 2. Natural Science Perspective on Health (6 cr): See attached list of course options on next page.
- 3. Additional Selectives (3 cr.) See below the list of course options

6. HUMAN ECOLOGY COURSES: 43 HUMEC cr & 9 cr outside major are required.

Student must complete **43 HUMEC credits** across all categories of graduation requirement. If all college and major requirements are met, a maximum of 12 cr in 4000, 4010, 4020, and 4030 may be counted toward 43 HUMEC and 120 Cornell credits. See Human Ecology for limits on Advanced Placement credits. *Among 43 HUMEC credits, at least 9 cr must come from outside major (non NS courses):* **9 cr outside major:** May <u>not</u> include HE 1000, 1010, 2010 or any 4030 course; maximum of 3 credits of 4000, 4010, 4020 may be applied. 8 credits of Urban Semester may be applied. 7 credits of Capital Semester may be applied.

HBHS Selectives:

Students must take a total of 15 credits as broken down in the following categories and are encouraged to choose at least one course on development (+), policy (*), and professional problem-solving (^). In addition, three (3) of these 15 credits must be from a Nutritional Science (NS) course.

Social Science Perspective on Health 6 credits

NS 2450 Social Science Perspectives on Food and Nutrition (F, 3 cr)

^ NS 4250 Nutrition Communications and Counseling (S, 3 cr)

NS 4450/AEM 4450 Toward a Sustainable Global Food System: Food Policy for Developing Countries (F, 3 cr)

- * NS 4500 Public Health Nutrition (S, 2 cr)
- ^ NS 4570 Health, Poverty, and Inequality: A Global Perspective (alt S, 3 cr)

NS 4600 Explorations in Global Health (S, 3cr)

- + HD 2180 Human Development: Adulthood and Aging (S, 3 cr)
- + HD 2510 Social Gerontology: Aging and the Life Course (S, 3 cr)
 - HD 3300 Developmental Psychopathology (S, 3 cr)
 - HD 3490 Positive Psychology (F, 3 cr)
 - HD 3570/SOC 3670 Social Inequalities in Physical and Mental Health (alt F, 3 cr)
 - HD 3620 Human Bonding (S, 3 cr)
- + HD 3700/PSYCH 3250 Adult Psychopathology (S, 3 cr)
 - HD 4520 Culture and Human Development (alt S, 3 cr)
 - HD 4570 Health and Social Behavior (alt F, 3 cr)
 - HD 4590 Life Transitions Across the Life Span (F, 3 cr)
 - HD 4770 Psychopathology in Great Works of Literature (F, 3 cr)
- * PAM 2350 The U.S. Health Care System (F, 3 cr)
- ^* PAM 3240 Risk Management and Policy (F, 3 cr)
 - PAM 3500 Contemporary Issues in Women's Health (F, 3 or 5 cr)
 - PAM 3110 Pharmaceutical Management and Policy (S, 3 cr)
 - PAM 3280 Fundamentals of Population Health (F, 3 cr)
 - PAM 4280 Economics of Health Behaviors (F, 3 cr)\
 - PAM 4370 Economics of Health Policy (S, 3 cr)
 - PAM 4380 Economics of Public Health (S, 3 cr)

Natural Science Perspective on Health 6 credits

- NS 2750 Human Biology and Evolution (alt F, 3 cr)
- + NS 3220 Maternal and Child Nutrition (alt S, 3 cr)
 - NS 3310 Nutrient Metabolism (S, 4 cr)
- ^ NS 3320 Methods in Nutritional Sciences (F, 3 cr)
 - NS 3450 Introduction to Physiochemical and Biological Aspects of Food (F, 3 cr)
 - NS 4130 Nutritional Genomics-Evolution and Environment (S, 2 cr)
 - NS 4310 Mineral Nutrition and Chronic Disease (F, 3 cr)
 - NS 4315 Nutrient Requirements and Recommendations: Biological Aspects (S, 3 cr)
 - NS 4370 Nutritional Immunology and Infectious Diseases (S, 2 cr)
 - NS 4410 Nutrition and Disease (F, 4 cr)
- ^ NS 4420 Implementation of Nutrition Care (F, 3 cr)
 - NS 4444 Sports Nutrition and Supplements, Concepts and Evidence (S, 3 cr)
- + NS 4750 Mechanisms Underlying Mammalian Developmental Defects (alt S, 3 cr)
 - NS 6140 Topics in Maternal and Child Nutrition (F, 3 cr)
 - NS 6310 Micronutrients: Function, Homeostasis and Assessment (F, 2-4 cr)
 - NS 6320 Regulation of Macronutrient Metabolism (S, 4 cr)
 - HD 2200 The Human Brain and Mind: Biological Issues in Human Development (F, 3cr)
 - HD 3200 Human Developmental Neuropsychology (S, 3 cr)
- + HD 3440 Infant Behavior and Development (F, 3 cr)
 - HD 3660 Affective and Social Neuroscience (S, 3 cr)
 - HD 4660 Psychobiology of Temperament and Personality (F, 3 cr)
 - HD 4780 Attention Deficit/Hyperactivity Disorder in Children (alt S, 3 cr)
- ^ DEA 4700 Applied Ergonomic Methods (alt S, 3 cr)
 - FSAD 4390 Biomedical Materials and Devices for Human Body (S, 3 cr)
 - PAM 3800 Human Sexuality (S, 4 cr)

Additional Credits 3 credits

Includes courses from either of the above categories or from the following:

- * NS 3060 Nutrition and Global Health (alt F, 3 cr)
 - NS 3150 Obesity and Regulation of Body Weight (alt S, 3 cr)
- NS 3500 Epidemiology in Context (F, 3cr)
- ^ CHE Special Studies 4000, 4010, 4020 and 4990