Human Development 2013-2014

The requirements listed below pertain to all students matriculating in August 2013 and January 2014.

I. Distribution Requirements

A.1. Natural Science: Biology Lecture:
3-4
   (if AP credit is not used, the course must be taken at Cornell)
   a. Score of 5 on AP Biology OR
   b. BIOG 1140 (recommended for non-pre-meds) OR
   c. BIOMG 1350 (for pre-meds) OR
      BIOG 1440 or 1445 (for pre-med)

A.2. Natural Science: Lecture (lab not required)
3-4
   (must be taken at Cornell; cannot apply AP credit
   a. Choose another biology course from the above list in A.1.c OR
   b. CHEM 1560 (for non-pre-meds) or CHEM 2070 (pre-meds) OR
      CHEM 2080 (for pre-meds OR
   c. PHYS 1101 or PHYS 2207 OR
      PHYS 1102 or PHYS 2208 OR
   d. Choose from the Human Ecology Natural Science Approved Course list:

   Note: HD recommends the courses on the list designated with an asterisk

**If you are pre-med see last page for more details on science requirements.

B. Social Sciences
6-8
Any two courses chosen from the following departments: Psychology, Sociology, Development Sociology, Anthropology, Economics or Government.

   Note: 1) Courses cross-listed with Human Development cannot be used to fulfill this requirement. 2) You cannot receive credit for both DSOC 1101 and SOC 1101.

C. Humanities**
3
Includes literature, history (including art and design history), philosophy, religion, and archaeology. Critical, historical, and theoretical studies of the arts and design are considered humanities. Languages and creative or performing arts such as the writing of fiction or poetry, painting, sculpting, designing, composing or performing music, acting, directing, and dance are not considered humanities.

**HD strongly recommends that students who plan to complete the HD Honors Program requirements (see III.B. below) take a course in health and medical ethics (e.g., BSOC/STS 2051) to fulfill this requirement.

D. Written Communications
6
Must be First-Year Writing Seminars
MUST BE COMPLETED DURING FIRST 2 SEMESTERS

E. Quantitative and Analytical
4
Statistics** (must be taken at Cornell, AP Statistics is not accepted)
   Choose one of the following:
   AEM 2100, BTRY 3010, ILRST/STSCI 2100, MATH 1710, PAM 2100, PSYCH 3500

   **HD strongly recommends that students, particularly those who plan to complete the HD Honors Program requirements (see III.B. below), take PSYCH 3500 to fulfill this requirement. The HD Honors Program also requires a second semester of more advanced statistics, and HD 4750 or HD 4760 is recommended.

F. Additional requirements
12
Any natural science, social science, humanities, language, or mathematics course can be counted here.

II. Requirements in the Major
36
A. Structural Principles
   1. Must complete 36 credits of Human Development didactic courses, letter grade only (HD 4000, 4010, 4020, 4030, 4980, and 4990 are not didactic courses and do not fulfill any requirements for the major). Only one course designated as LAB may count towards the 36 required credits in Human Development.
   2. HD 1150 (Intro to HD: Infancy & Childhood) and HD 1170 (Intro to HD: Adolescence & Emerging Adulthood) are required.
   3. Students must take two 2000-level courses in Human Development. The courses must come from two different areas (i.e., Cognitive; Social & Personality; Aging & Health), unless the course is relevant to all areas (e.g., HD 2580). A 2000-level course provides breadth of knowledge and may be necessary for completing more advanced courses in that area. Ideally, 2000-level courses should be completed by the end of the sophomore year.

   Cognitive:
   HD 2200 Human Brain & Mind: Bio. Issues in Human Development
   HD 2300 Cognitive Development
   HD 2380 Thinking & Reasoning

   Social & Personality:
   HD 2600 Intro to Personality

   Aging & Health:
   HD 2180 Human Development: Adulthood and Aging
   HD 2510 Social Gerontology: Aging and the Life Course

   Can be taken to fulfill the 2000 level requirement in the Cognitive; or Social & Personality; or Aging & Health area.
   HD 2580 Six Pretty Good Books: Explorations in Social Science
4. **Scientific Research Method practice is required**
   1. Score of 5 on AP Biology OR
   2. BIOG 1500 OR
   3. HD 2830 (credit for this course is tallied in II.A.4.)

   The scientific methods requirement must be fulfilled before the senior year. **Students who plan to complete the HD Honors Program requirements** (see III.B below) **must take HD 2830.** Biology laboratory courses may not be used to fulfill the Research Methods requirement for the HD Honors program.

5. Must complete at least 18 credits in Human Development didactic courses at the 3000- and 4000-level; 6 of these credits must be at the 4000-level.

6. Must complete a **concentration** in one of five areas of Human Development (listed below).
   - A concentration consists of a **minimum of four** courses at the 3000- or 4000-level.
   - One 4000-level course must be taken in the chosen concentration.
   - Students must contact the CHE Assistant Registrar by junior year to declare a concentration.
   - Students should note that some courses in Developmental Behavioral Neuroscience may require pre-requisite courses taught in Psychology or Neurobiology & Behavior.

7. Must complete at least one **3000- or 4000-level** course **outside the first declared concentration.**

   **B. Areas of Concentration**
   
   **Only HD courses taken for a letter grade may be used to fulfill concentrations and count for the 36 HD credits needed for graduation.**

   **Cognitive Development**
   
   HD 3110 Educational Psychology
   HD 3190 Memory and the Law
   HD 3200 Human Developmental Neuropsychology
   HD 3330 Children and the Law
   HD 3340 Growth of the Mind
   HD 3370 Language Development
   HD 3380 Social Cognition and Development
   HD 4200 Risk and Rational Decision Making
   HD 4250 LAB: Translational Research on Decision Making
   HD 4260 LAB: Translational Research on Memory and Neuroscience
   HD 4270 LAB: Cybertools for the Scientific Study of Language Acquisition
   HD 4300 Concepts and Theories in Childhood
   HD 4310 Mind, Self, and Emotion
   HD 4320 Cognitive, Social, and Developmental Aspects of Scientific Reasoning
   HD 4330 Developmental Cognitive Neuroscience
   HD 4340 Current Topics in Cognitive Development
   HD 4350 Development of Cognitive Sex Differences
   HD 4370 LAB: Language Development
   HD 4490 Children’s Learning in Social Context
   HD 4580 The Science of Social Behavior
   HD 4740 Autism and the Development of Social Cognition

   **Developmental Behavioral Neuroscience**
   
   HD 3200 Human Developmental Neuropsychology
   HD 3440 Infant Behavior and Development
   HD 3470 Human Growth and Development: Biological and Behavioral Interactions
   HD 3660 Affective and Social Neuroscience
   HD 4330 Developmental Cognitive Neuroscience
   HD 4580 The Science of Social Behavior
   HD 4630 Introduction to Functional MRI Analysis for Human Neuroimaging
   HD 4660 Psychobiology of Temperament and Personality
   HD 4740 Autism and the Development of Social Cognition
   HD 4780 Attention Deficit/Hyperactivity Disorder in Children

   **Social & Personality Development**
   
   HD 3300 Developmental Psychopathology
   HD 3380 Social Cognition and Development
   HD 3420 Participation with Children, Families and Their Communities
   HD 3430 Social Worlds of Childhood
   HD 3460 Role and Meaning of Play
   HD 3490 Positive Psychology
   HD 3510 Racial and Ethnic Identity Development
   HD 3530 Risk and Opportunity Factors in Childhood and Adolescence
   HD 3620 Human Bonding
   HD 3700 Adult Psychopathology
   HD 3840 Gender and Sexual Minorities
   HD 4140 Social and Psychological Aspects of the Death Penalty
   HD 4150 Seminar on Emerging Adulthood
   HD 4200 Risk and Rational Decision Making
   HD 4220 LAB: Research in Emotion and Cognition
   HD 4240 LAB: Stress, Emotions and Health
   HD 4250 LAB: Translational Research on Decision Making
   HD 4280 LAB: Research on Healthy Aging
   HD 4310 Mind, Self, and Emotion
   HD 4480 Advanced Participation with Young Children (4 credits only)
   HD 4520 Culture and Human Development
   HD 4580 The Science of Social Behavior
   HD 4590 Transitions across the Life Span
   HD 4640 Adolescent Sexuality
   HD 4680 Stress in Childhood and Adolescence
   HD 4690 LAB: Research on Adult Attachment Phenomena
   HD 4770 Psychopathology in Great Works of Literature

   **Aging & Health**
   
   HD 3490 Positive Psychology
   HD 3570 Social Inequalities in Physical and Mental Health
   HD 4180 Aging: Contemporary Issues
   HD 4190 Midlife Development
   HD 4200 Risk and Rational Decision Making
   HD 4220 LAB: Research in Emotion and Cognition
   HD 4240 LAB: Stress, Emotions and Health
   HD 4250 LAB: Translational Research on Decision Making
HD 4280 LAB: Research on Healthy Aging
HD 4570 Health and Social Behavior
HD 4580 The Science of Social Behavior
HD 4590 Transitions across the Life Span

Law, Psychology and HD
HD 3190 Memory and the Law
HD 3330 Children and the Law
HD 4140 Social and Psychological Aspects of the Death Penalty
HD 4200 Risk and Rational Decision Making
HD 4250 LAB: Translational Research on Decision Making
HD 4260 LAB: Translational Research on Memory and Neuroscience
HD 4580 The Science of Social Behavior

III. Electives Variable

A. Suggested Human Ecology electives related to HD (will also fulfill HE credit outside the major)
  DEA 1500 Introduction to Human Environment Relations
  DEA 2700 Healthy Places
  NS 1150 Nutrition, Health, and Society
  NS 2450 Social Science Perspectives on Food and Nutrition
  NS 3150 Obesity and the Regulation of Body Weight
  PAM 2030 Population and Public Policy
  PAM 3360 Evolving Families: Challenges to Family Policy
  PAM 3370 Racial and Ethnic Differentiation
  PAM 3500 Contemporary Issues in Women’s Health
  PAM 3800 Human Sexuality

B. Human Development Honors Program
Honors in Human Development is a two-year program. The application for the honors program should be submitted in the fall of the junior year, by October 15.
Applicants must be HD majors and have a GPA of 3.5 or higher.
Applicants must complete the first statistics class before applying to the program.

REQUIRED COURSE WORK
HD 4010 research with a faculty member (begun no later than the fall semester of the junior year.

Sophomore year:
One basic Cornell Statistics class (PSYCH 3500 is strongly recommended)
The HD 2830, Research Methods, is strongly recommended for the sophomore year
Must be taken for letter grade – no S/U allowed.

Junior year:
One advanced Cornell Statistics course. HD 4750 or HD 4760 is strongly recommended. (Other available courses include ILRST 2110, PAM 3100, BTRY 3020, MATH 2710). HD 4750 and HD 4760 count towards the 36 HD required credits in Human Development, but do not count towards any concentration.

If necessary, HD2830 Research Methods. Students cannot be admitted to the HD Honors Program unless they have completed HD2830.
Both courses must be taken for letter grade only – no S/U allowed.

Senior year:
HD 4980 Senior Honors Seminar AND HD 4990 Senior Honors Thesis, plus completion of the honors thesis

Also Recommended for the Honors Program
One course in ethical issues in research (e.g., BSOC/STS 2051, PHIL 2450)
Two 3000 and/or 4000 level classes relating to the topic of the honors thesis

IV. Physical Education
Physical Education must be completed in order to graduate. However, physical education does not count toward college and university minimum credit requirements for full-time status, nor does it count towards the 120 credits required for graduation.

Total Credits (exclusive of PE) 120
College Requirements:

- **Students must complete a minimum of 9 HUMEC credits outside of HD.** These credits are given for any Human Ecology course outside your major from Category I, II, or III. These can be taken S/U only if course is NOT used to fulfill a curriculum requirement.

- **Students must complete a minimum of 43 HUMEC credits.** Hum Ec credits are given in Category I (distribution), Category II (in your major) and Category III (electives).

- **Biology & Society (BSOC) courses do not count** as Human Ecology credit or towards the 9 HE credits outside the major.

- **Pass/Fail Courses [S/U]**
  - S/U grading option may NOT be used for any required course [i.e., distribution requirements in Category I or major courses in Category II] unless it is the only grade option offered for those courses.
  - S/Us MAY be used for the 9 credits of Human Ecology coursework outside of the major and for electives in Category III.
  - Students may apply no more than 12 credits of S/U towards graduation requirements. If a required course is only offered S/U, it will not count towards this limit. Students may take more S/Us if they choose, but the additional credit will not be applied towards graduation.
  - The deadline for changing grade options is 7 weeks after the start of classes, the same as the “drop” deadline.

- **Special Study Courses [4000, 4010, 4020, 4030]**
  - A total of 12 credits of special study course work from Human Ecology or other colleges will count towards the 120 graduation credit requirement. [Additional credits can be taken but will not be applied.]
  - A maximum of three credits of 4000-4020 (not including 4030) may count towards the “credit outside the major” category as long as the special study is in a department outside the student’s major.
  - Students cannot TA (4030) the same course for credit more than once or take and TA the same course simultaneously. 4030 does not fulfill any requirements towards the major. Registration for 4030 may not exceed 5 credit hours per semester.

- **Students must complete 120 credits overall, exclusive of physical education and “00” courses.**

- Elective credits can be earned in Human Ecology or elsewhere.

### Pre-Med Students only:
(Not required for graduating from Human Ecology with a Human Development degree.)

<table>
<thead>
<tr>
<th>Additional Credits</th>
<th>26</th>
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<tbody>
<tr>
<td>Biology</td>
<td></td>
</tr>
<tr>
<td>BIOG 1500 – Investigative Laboratory</td>
<td>2</td>
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<tr>
<td>Chemistry:</td>
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<tr>
<td>CHEM 2070 – 2080 General Chemistry AND</td>
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<tr>
<td>Organic Chemistry:</td>
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<tr>
<td>CHEM 3570 – 3580 Organic Chemistry Lecture &amp; 2510 Lab</td>
<td>8</td>
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<tr>
<td>Physics:</td>
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<tr>
<td>PHYS 1101 – 1102 General Physics OR</td>
<td>8</td>
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<tr>
<td>PHYS 2207 – 2208 Fundamentals of Physics</td>
<td>8</td>
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A complete list of pre-med requirements is listed in the Cornell Career Services Guide to Careers in Human Health.