The requirements listed below pertain to all students matriculating in August 2015 and January 2016.

Credits

I. Distribution Requirements 37-41

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-meds)

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
   (PAM 2100 can fulfill the statistics requirement and count toward the 9 credits
   required outside the major and will count toward the 43 total credits required in
   Human Ecology.)
   **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 different areas (i.e., Cognitive; Human Neuroscience,
      etc. as listed below) or be listed as a cross-area course below, relevant to more
      than one area. The 2000-level courses provide fundamental knowledge for
      concentrations in Human Development and ideally should be completed by the
      end of the sophomore year.
      **Cognitive:**
      HD 2300 Cognitive Development
      **Human Neuroscience:**
      HD 2200 Human Brain and Mind: Issues in Human Development
Social & Personality:
  HD 2500 Narratives of Women’s Lives
  HD 2600 Intro to Personality
  HD 2710 The Black Family and Socialization of Black Children

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

Law, Psychology and HD:
  HD 2650 Psychology and Law

Cross-Area Courses:
  HD 2580 Six Pretty Good Books: Explorations in Social Science
  HD 2800 Cultural Psychology

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 at least one 3000- or 4000-level course outside the first declared concentration

7. 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.
   - A 4000-level course is strongly recommended to complete a concentration.
   - Students must contact the CHE Assistant Registrar by junior year to declare a concentration.
   - Students should note that some courses in Human Neuroscience may require pre-requisite courses taught in Psychology or Neurobiology & Behavior

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 3330 Children and the Law
   HD 3340 Growth of the Mind
   HD 3370 Language Development
   HD 3380 Social Cognition and Development

   HD 3450 The Nature of Leadership
   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: Cyber tools for the Scientific Study of Language Acquisition
   HD 4300 Concepts and Theories in Childhood
   HD 4310 Mind, Self, and Emotion
   HD 4330 Developmental Cognitive Neuroscience
   HD 4340 Current Topics in Cognitive Development
   HD 4370 LAB: Language Development
   HD 4380 Language and Thought throughout Development
   HD 4440 The Nature of Human Intelligence
   HD 4450 Ethical Challenges in Behavioral and Brain Sciences
   HD 4490 Children’s Learning in Social Context
   HD 4580 The Science of Social Behavior
   HD 4620 LAB: Brain Activity and Cognition

   Human Neuroscience
   HD 3250 Neurochemistry of Human Behavior
   HD 3440 Infant Behavior and Development
   HD 3470 Human Growth and Development: Biological and Behavioral Interactions
   HD 3660 Affective and Social Neuroscience
   HD 4250 LAB: Translational Research in Decision Making
   HD 4260 Translational Research on Memory and Neuroscience
   HD 4440 The Nature of Human Intelligence
   HD 4450 Ethical Challenges in Behavioral and Brain Sciences
   HD 4580 The Science of Social Behavior
   HD 4620 LAB: Brain Activity and Cognition
   HD 4830 Introduction to Functional MRI Analysis for Human Neuroimaging
   HD 4860 Psychobiology of Temperament and Personality
   HD 4720 LAB: Research in Emotion, Cognition and Brain
   HD 4730 LAB: Network Neuroscience: Selected Topics
   HD 4780 Attention Deficit/Hyperactivity Disorder in Children

   Social & Personality Development
   HD 3300 Developmental Psychopathology
   HD 3380 Social Cognition and Development
   HD 3450 The Nature of Leadership
   HD 3460 Serious Fun! The Role of Play Throughout Development
   HD 3490 Positive Psychology
   HD 3510 Racial and Ethnic Identity Development
   HD 3620 Human Bonding
   HD 3700 Adult Psychopathology
   HD 4140 Social and Psychological Aspects of the Death Penalty
   HD 4150 Seminar on Emerging Adulthood
   HD 4170 The Translation of Research into Practice and Policy
   HD 4200 Risk and Rational Decision Making
   HD 4240 LAB: Stress, Emotions and Health
   HD 4250 LAB: Translational Research on Decision Making
   HD 4280 LAB: Research on Healthy Aging
Aging & Health
HD 3490 Positive Psychology
HD 3570 Social Inequalities in Physical and Mental Health
HD 4190 Midlife Development
HD 4200 Risk and Rational Decision Making
HD 4240 LAB: Stress, Emotions and Health
HD 4250 LAB: Translational Research on Decision Making
HD 4280 LAB: Research on Healthy Aging
HD 4440 The Nature of Human Intelligence
HD 4450 Ethical Challenges in Behavioral and Brain Sciences
HD 4570 Health and Social Behavior
HD 4580 The Science of Social Behavior
HD 4590 Transitions across the Life Span
HD 4730 LAB: Network Neuroscience: Selected Topics

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 4440 The Nature of Human Intelligence
HD 4450 Ethical Challenges in Behavioral and Brain Sciences
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 Environmental Psychology
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 2220 Controversies about Inequality

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, HD 2830 Research Methods. Students cannot be admitted to the HD Honors Program unless they have completed HD 2830.
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 the 57th calendar day of the semester, 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.

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

**Additional Credits**  

<table>
<thead>
<tr>
<th>Subject</th>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>BIOG 1500 – Investigative Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>Chemistry</td>
<td>CHEM 2070 – 2080 General Chemistry AND CHEM 3570 – 3580 Organic Chemistry Lecture &amp; 2510 Lab</td>
<td>8</td>
</tr>
<tr>
<td>Organic Chemistry</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Physics</td>
<td>PHYS 1101 – 1102 General Physics OR PHYS 2207 – 2208 Fundamentals of Physics</td>
<td>8</td>
</tr>
</tbody>
</table>

* A complete list of pre-med requirements is listed in the Cornell Career Services Guide to Careers in Human Health.