**Human Development 2011-2012**

The requirements listed below pertain to all students matriculating in August 2011 and January 2012.

### Credits

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Distribution Requirements</td>
</tr>
</tbody>
</table>

#### A. Natural Sciences: 6-8

**A.1. Natural Science lecture (lab not required*)**

**HD requires that the natural science lecture be a biology course.**

- **a.** Score of 5 on AP Biology **OR**
- **b.** Must choose from the following list (must be taken at Cornell):
  - BIOG 1105
  - BIOG 1106
  - BIOG 1140
  - BIMG/BIOG 1350* or BIOG 1440* or BIOG/BIOEE 1610*
  - *one semester of BIOG 1500 Investigative Lab can also be taken but is not required
  - **Scientific Research Method practice is required**
  - May complete requirement with AP Biology score of 5 or by taking BIOG 1500, BIOG 1105, BIOG 1106 or HD 2830. Credit for HD 2830 is tallied in II.A.4.

**A.2. Natural Science (lab not required, must be taken at Cornell, no AP credit)**

- **a.** Choose another biology course from the above list in A.1. **OR**
- **b.** CHEM 1560 or CHEM 2070
  - PHYS 1101 or PHYS 2207
  - PHYS 1102 or PHYS 2208 **OR**
- **c.** Choose from the Human Ecology Natural Science Approved Course list:
  - HD recommends the courses on the list designated with an asterisk
  - [http://www.human.cornell.edu/registrar/requirements-and-policies.cfm](http://www.human.cornell.edu/registrar/requirements-and-policies.cfm)

#### 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, except for HD 1840. 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 PSYCH 3500 to fulfill this requirement. The HD Honors Program also requires a second semester of more advanced statistics.

#### 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 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 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.

#### F. Additional requirements 12

Any natural science, social science, humanities, language, or mathematics course can be counted here.

### II. Requirements in the Major

#### A. Structural Principles

1. Must complete 30 credits of Human Development didactic courses, **letter grade only** (HD 4000, 4010, 4020, 4030, 4400, 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 30 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 a total of two 2000-level courses in Human Development.** The courses must come from **two different** areas. The three areas and the courses from which students may choose are listed below. A 2000-level course introduces material necessary for completing more advanced courses in that area. Ideally, 2000-level courses must 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
   - HD 2610 Development of Social Behavior

   **Aging & Health:**
   - HD 2180 Human Development: Adulthood and Aging
   - HD 2510 Social Gerontology: Aging and the Life Course
4. One class incorporating practice in experimental scientific research methods, chosen from the following list: AP Biology score of 5, BIOG 1500; BIOG 1105; BIOG 1106; HD 2830. 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 15 credits in Human Development didactic courses at the 3000- and 4000-level; 3 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 three classes at the 3000- or 4000-level.
   - The required 4000-level course must be taken in the chosen concentration.
   - Students are strongly encouraged to take more than three courses in their 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 course **outside the first declared concentration**, other than a 2000-level course.

**B. Areas of Concentration**

**Only HD courses taken for a letter grade may be used to fulfill concentrations and count for the 30 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 4270 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 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 4740 Autism and the Development of Social Cognition
- HD 4840 The Science of Social Behavior

**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 4660 Psychobiology of Temperament and Personality
- HD 4740 Autism and the Development of Social Cognition
- HD 4780 Attention Deficit/Hyperactivity Disorder in Children
- HD 4840 The Science of Social Behavior

**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 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 4590 Transitions across the Life Span
- HD 4640 Adolescent Sexuality
- HD 4680 Stress in Childhood and Adolescence
- HD 4840 The Science of Social Behavior

**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
III. Electives

A. Suggested Human Ecology electives related to HD

(\textit{will also fulfill HE credit outside the major})

- DEA 1500 Introduction to Human Environment Relations
- 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 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 \textit{fall of the junior year, by October 15}. Applicants must be \textbf{HD majors} and have a \textbf{GPA of 3.5 or higher}. Applicants must \textbf{complete the first statistics class} before applying to the program.

\textbf{REQUIRED COURSE WORK}

- \textbf{Sophomore year:} HD 4010 research with a faculty member (begun no later than the fall semester of the junior year).

- \textbf{Junior year:} One advanced Cornell Statistics course (e.g., ILRST 2110, PAM 3100, BTRY 3020, MATH 2710)
  If necessary, HD2830 Research Methods. Students cannot be admitted to the HD Honors Program unless they have completed HD2830
  \textbf{Both} courses must be taken for letter grade only – no S/U allowed.

- \textbf{Senior year:} HD 4980 Honors in Human Development AND HD 4990 Honors Seminar plus completion of the honors thesis

\textbf{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 does not count toward college and university minimum credit requirements for full-time status.

\textbf{Total Credits (exclusive of PE)} \hspace{1cm} 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 3 weeks** after the start of classes, the same as the “add” 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.