**FIBER SCIENCE 2014-2015**

**SUGGESTED ENROLLMENT SEQUENCE – USE WITH CURRICULUM SHEET**

<table>
<thead>
<tr>
<th>FALL 1 '14</th>
<th>SPRING 1 '15</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSAD 1350 Fibers, Fabrics &amp; Finishes (3)</td>
<td>FSAD 2370 Structural Fabric Design (3)</td>
</tr>
<tr>
<td>FSAD 1360 Fiber and Yarn Analysis Lab (1)</td>
<td>Calculus II (4) [see list I.E.2.]</td>
</tr>
<tr>
<td>MATH 1120, 1220 or 1910 Calculus I (4)</td>
<td>CHEM 2080 or 2160 General Chemistry (4)</td>
</tr>
<tr>
<td>CHEM 2070 General Chemistry (4)</td>
<td>Freshman Writing Seminar* (3)</td>
</tr>
<tr>
<td>Freshman Writing Seminar* (3)</td>
<td>PE (1)</td>
</tr>
<tr>
<td>PE (1)</td>
<td>14 credits</td>
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</tbody>
</table>

15 credits

*Freshman Writing Seminars MUST be taken in 1st year.

**SUMMER 1**

**FALL 2 '15**

<table>
<thead>
<tr>
<th>SPRING 2 '16</th>
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<tbody>
<tr>
<td>Physics (4) (PHYS 1101 or 1112 or 2207)</td>
</tr>
<tr>
<td>Social Sciences (3) [see list I.B]</td>
</tr>
<tr>
<td>CS 1110 or 1112 Programming (3-4)</td>
</tr>
<tr>
<td>IB Social Science or IC Humanities (3-4)</td>
</tr>
<tr>
<td>HE Elective (3)</td>
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16-18 credits

**SUMMER 2**

**FALL 3 '16**

<table>
<thead>
<tr>
<th>SPRING 3 '17</th>
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<tbody>
<tr>
<td>FSAD 3350 Fiber Science (3)</td>
</tr>
<tr>
<td>CHEM 3570 Organic Chemistry for Life Sciences (3)*</td>
</tr>
<tr>
<td>Statistics (3) [see list I.E.1.]</td>
</tr>
<tr>
<td>IF3 or from choose 1 list below (3)</td>
</tr>
<tr>
<td>*Choose one of these sequences:</td>
</tr>
<tr>
<td>CHEM 3570-3580 and 2510</td>
</tr>
</tbody>
</table>

15-16 credits

17 credits

**SUMMER 3**

**FALL 4 '17**

<table>
<thead>
<tr>
<th>SPRING 4 '18</th>
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</thead>
<tbody>
<tr>
<td>FSAD 4660 Textiles, Apparel &amp; Innovation (3)</td>
</tr>
<tr>
<td>FSAD Elective II** (3)</td>
</tr>
<tr>
<td>IF3 or from choose 1 list below (3)</td>
</tr>
<tr>
<td>Electives (9)</td>
</tr>
</tbody>
</table>

18 credits

Choose 1 of the following

<table>
<thead>
<tr>
<th>IF3 sequences:</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSAD 6160 Rheology of Solids: Dynamic Mechanical Analysis of Fibers and Polymers</td>
</tr>
<tr>
<td>FSAD 6200 Physical Properties of Fiber – Forming Polymers and Fibers</td>
</tr>
<tr>
<td>FSAD 6260 The Chemistry of Textile Finishes and Dyeing</td>
</tr>
<tr>
<td>FSAD 6660 Fiber Formation: Theory and Practice</td>
</tr>
</tbody>
</table>

*Foreign Language recommended

**DO NOT DISCARD – THIS WILL BE YOUR WORKSHEET FOR ALL FOUR YEARS**
I. Distribution Requirements

A. Natural Sciences
Choose one of the following sequences:

- CHEM 1560 – 2080 General Chemistry
- CHEM 2070 – 2080 General Chemistry
- CHEM 2090 Engineering General Chemistry – 2080 General Chemistry
- CHEM 2150 – 2160 Honors General and Inorganic Chemistry

B. Social Sciences

I.B. HD 1150 Human Development: Infancy and Childhood
OR
HD 1170 Human Development: Adolescence and Emerging Adulthood

OR

I.B.2. ECON 1110 Introductory Microeconomics

C. Humanities
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.

D. Written Communications
Must be First-Year Writing Seminars

MUST BE COMPLETED DURING FIRST 2 SEMESTERS

E. Quantitative and Analytical

a. Either Statistics or Calculus must be taken at Cornell unless you have earned a score of 3 or higher on AP Calculus BC.
b. Once the above requirement is met, other AP credit from Calculus AB (a score of 3 or higher) or Statistics (a score of 4 or 5) may be applied to the Quantitative and Analytical requirement if the content is not overlapping.

I.E.1. Statistics
Choose one of the following:

- AEM 2100, BTRY 3010, BTRY 6010, IRST/STSCI 2100, MATH 1710, PAM 2100, PSYCH 3500, ENGRD 2700

E. Quantitative and Analytical (continued)

I.E.2. Calculus
Choose one of the following sequences:

- MATH 1110 – 1120
- MATH 1110 – 1220
- MATH 1910 – 1920 (preferred)

F. Additional credits

I.F.1. Organic Chemistry
CHEM 3570 – 3580 AND 2510

I.F.2. Choose one of the following sequences:

- PHYS 1101 – T102
- PHYS 1112 – 2213
- PHYS 2207 – 2208

I.F.3. Choose one of the following sequences:

- CHEM 2870 - 2880 Introductory Physical Chemistry
- CHEM 3890 - 3900 Honors Physical Chemistry
- MSE 2610 Mechanical Properties of Materials: From Nanodevices to Superstructures AND MSE 3010 Materials Chemistry
- BIOG 1107 Introductory Biology I: From Atom to Cell (summer only) AND
- BIOG 1108 Introductory Biology II: From Cell to Biosphere (summer only)
- BIOG 1500 Investigative Biology Laboratory AND

Choose two out of three from the following lecture options:

a) BIOMG 1350 Principles of Cell and Development Biology
b) BIOG 1440 Intro. to Comparative Physiology OR BIOG 1445 Autotutorial Physiology
c) BIOEE 1610 Ecology and the Environment

DEA 3250 Human Factors: Ergonomics/Anthropometrics AND DEA 4520 Applied Anatomy and Biomechanics for Ergonomic Design

1.F.4. Ethics/Sustainability: Choose one course from the following:

- BEE 3299 Sustainable Development: A Web-Based Course
- BSOC 2051 Ethical Issues in Health and Medicine (also STS 2051)
- BSOC 2061 Ethics and the Environment (also STS 2061, PHIL 2480)
- CRP 3011 Ethics, Development and Globalization
- DEA 4220 Ecological Literacy and Design (also ARCH 4601)
- DSOC 3240 Environment and Society
- GOVT 4971 Ethics in International Relations
- IARD 4020/6020 Agriculture in Developing Nations (International Agriculture in Developing Nations
- ILRLR 4820 Ethics at Work
- LA4950 Green Cities: The Future of Urban Ecology (also CRP 3840)
- NTRES 3320 Introduction to Ethics and the Environment
- NTRES 4310 Environmental Strategies
- PAM 5520 Health Care Services: Consumer & Ethical Perspectives
- PHIL 1450 Contemporary Moral Issues
- PHIL 2410 Ethics
- PHIL 2450 Ethics and Health Care

II. Requirements in the Major

A. Must take the following:

Choose one of the following:

- BEE 1510 Introduction to Computer Programming
- CS 1110 Introduction to Computing Using Java
- CS 1112 Introduction to Computing Using MATLAB
- CS 1300/INFO 1300 Introductory Design and Programming for the Web
- FSAD 1140 Introduction to Computer-Aided Design

Choose one of the following:

- FSAD 4390 Biomedical Materials and Devices for Human Body Repair
- FSAD 6160 Rheology of Solids: Dynamic Mechanical Analysis of Fibers and Polymers
- FSAD 6200 Physical Properties of Fiber – Forming Polymers and Fibers
- FSAD 6260 The Chemistry of Textile Finishes and Dyeing
- FSAD 6660 Fiber Formation: Theory and Practice

III. Electives

Recommended:

- Human Ecology Distribution (9 credits)
- Foreign Language
- COMM 2010 Oral Communication
- HADM 3650 Managerial Communication