### OPTION 3: FIBER SCIENCE 2012-2013

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

#### FALL 1 ’12
- FSAD 1350 Fibers, Fabrics & Finishes (3)
- FSAD 1360 Fiber and Yarn Analysis Lab (1)
- MATH 1120 or 1220 Calculus I (4)
- CHEM 2070 General Chemistry (4)
- Freshman Writing Seminar* (3)
- PE (1)

16 credits

#### SPRING 1 ’13
- FSAD 2370 Structural Fabric Design (3)
- Calculus II (4) [see list I.E.2.]
- CHEM 2080 or 2160 General Chemistry (4)
- Freshman Writing Seminar* (3)
- PE (1)

15 credits

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

**NOTE:** Students must complete 12 Human Ecology CREDITS by END of Sophomore year. **THEY MUST TAKE AT LEAST 5 OF THOSE CREDITS EACH YEAR** (i.e. they cannot enroll in 12 credits one year and no credits the next year).

#### SUMMER 1

#### FALL 2 ’13
- Physics (4) (PHYS 1101 or 1112 or 2207)
- Psych 1101 or HD 1150 or HD 1170 (3)
- CS 1110 or 1112 Programming (3-4)
- Elective (3-4)
- HE Elective (3)

16-18 credits

#### SPRING 2 ’14
- FSAD 3320 Product Quality Assessment (3)
- FSAD 4360 Fiber Chemistry (3)
- Ethics/Sustainability (3-4)(Humanities)
- Physics (4) (PHYS 1102 or 2213 or 2208)
- HE Elective (3)

16-17 credits

**NOTE:** Students must complete 12 Human Ecology CREDITS by END of Sophomore year. **THEY MUST TAKE AT LEAST 5 OF THOSE CREDITS EACH YEAR** (i.e. they cannot enroll in 12 credits one year and no credits the next year).

#### SUMMER 2

#### FALL 3 ’14
- FSAD 3350 Fiber Science (3)
- CHEM 3570 Organic Chemistry for Life Sciences (3)
- Organic Chemistry Lab (2) (CHEM 2510)
- Statistics (3) [see list I.E.1.]
- MSE 2610 Mechanical Properties of Materials (3)

*Choose one of these sequences: CHEM 3570-3580 and 2510 OR CHEM 2510-2520 and 1570

17 credits

#### SPRING 3 ’15
- FSAD Elective I** (3)
- ECON 1110 Introductory Microeconomics (3)
- CHEM 3580 Organic Chemistry for Life Sciences (3)
- Communications/Language (3)
- HE Electives (6)

18 credits

**NOTE:** Students must complete 12 Human Ecology CREDITS by END of Sophomore year. **THEY MUST TAKE AT LEAST 5 OF THOSE CREDITS EACH YEAR** (i.e. they cannot enroll in 12 credits one year and no credits the next year).

#### SUMMER 3

#### FALL 4 ’15
- FSAD 4660 Textiles, Apparel & Innovation (3)
- FSAD Elective II** (3)
- MSE 3010 Material Chemistry (3)
- Electives* (9)

18 credits

#### SPRING 4 ’16
- FSAD Elective III** (3)
- Electives (12)

15 credits

**FSAD Electives - any THREE below:**
- FSAD 4390 Biomedical Material Devices for Human Body Repair (3)
- also BME 5390
- FSAD 6160 Rheology of Solids: Dynamic Mechanical Analysis of Fibers and Polymers (3)
- FSAD 6230 Physical Properties of Fiber Forming Polymers (3) or FSAD 6260 Chemistry of Textile Finishes & Dyeing (3)
- FSAD 6390 Properties of Fibrous Systems (3)
- FSAD 6660 Fiber Formation: Theory & Practice (3)

*Foreign Language recommended

#### SUMMER 4

#### FALL 5 ’16
- FSAD 5660 Textiles, Apparel & Innovation (3)
- FSAD Elective IV** (3)
- MSE 3010 Material Chemistry (3)
- Electives* (9)

18 credits

#### SPRING 5 ’17
- FSAD Elective V** (3)
- Electives (12)

15 credits

**FSAD Electives - any THREE below:**
- FSAD 4390 Biomedical Material Devices for Human Body Repair (3)
- also BME 5390
- FSAD 6160 Rheology of Solids: Dynamic Mechanical Analysis of Fibers and Polymers (3)
- FSAD 6230 Physical Properties of Fiber Forming Polymers (3) or FSAD 6260 Chemistry of Textile Finishes & Dyeing (3)
- FSAD 6390 Properties of Fibrous Systems (3)
- FSAD 6660 Fiber Formation: Theory & Practice (3)

*Foreign Language recommended

**Other Recommended Electives:**
- One of CHEM 2870-2880 Introductory Physical Chemistry or CHEM 2890-3890 Honors Physical Chem I and II sequences
- CHEM 6400 Polymeric Materials
- MSE 5210 Properties of Solid Polymers
- TAM 4550 Intro to Composite Materials (also CEE 4770, MAE 4550, and MSE 5550)

**Rev. May 9, 2012**

**DO NOT DISCARD – THIS WILL BE YOUR WORKSHEET FOR ALL FOUR YEARS**

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<th>GRADUATE LEVEL COURSES</th>
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<tr>
<td>Fall 2012 – 6900 – Park</td>
<td>Spring 2014 – 6700 – Lewis</td>
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<tr>
<td>Fall 2013 – 6700 – Jirousek (alternating with FSAD 4200)</td>
<td>Fall 2016 – 6700 – Lewis</td>
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<tr>
<td>Fall 2014 – 6600 – Ashdown</td>
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