COLLEGE OF NATURAL RESOURCES AND ENVIRONMENT
Department of Sustainable Biomaterials
Bachelor of Science in Packaging Systems & Design
For students entering under UG Catalog 2023-2024

Minimum hours required for graduation is 120.

I. Packaging Systems and Design Degree Core Requirements – 38 hours
   __ SBIO 1014 Introduction to Packaging Systems and Design (1)
   __ SBIO 1114 A Sustainable Future through Circular Economy (3)
   __ SBIO 2004 CAD in Packaging (3)
   __ SBIO 2104 Principles of Packaging (3)
   __ SBIO 3224 Packaging Distribution Systems (3) (Pre: SBIO 2104)
   __ SBIO 3284 Packaging Polymers and Production (3) (Pre: SBIO 2104)
   __ SBIO 3314 Mechanics of Sustainable Biomaterials and Packaging (4) (Pre: PHYS 2205 or PHYS 2305)
   __ SBIO 4024 Packaging Design for Global Distribution (3) (Pre: SBIO 3224)
   __ SBIO 4054 Packaging Systems Design Practicum (3) (Pre: Senior standing)
   __ SBIO 4214 Food and Health Care Packaging (3) (Pre: SBIO 3124, SBIO 3284)
   __ SBIO 4224 Industrial Packaging (3) (Pre: SBIO 3224, SBIO 4024)
   __ CHEM 2514 Survey of Organic Chemistry (3) (Pre: (1035 or 1055 or 1055H), (1036 or 1056 or 1056H))

II. Business – 3 credit hours
    Choose 1 course from:
    __ MKTG 3104 Marketing Management (3) (Pre: Junior standing required)
    __ SBIO 2614 Intro to Forest Products Marketing (3)
    __ SBIO 3464 Sustainable Operations Management (3) (Pre: STAT 2004 or STAT 3615)

III. Chemical and Physical Sciences – 7 credit hours
    __ BIOL 1115 Principles of Biology Laboratory (1) (Co: BIOL 1105)
    __ PHYS 2205 General Physics (3) (Pre: MATH 1016 or MATH 1016H or MATH 1025 or MATH 2015 or
       MATH 1026 or MATH 1205 or MATH 1205H or MATH 1525 or MATH 1535 or MATH 1225 or MATH 1225H)
    __ CHEM 1036 General Chemistry (3) (Co: MATH 1025 or MATH 1225. Pre: CHEM 1035 or CHEM 1055 or
       CHEM 1055H)

IV. Restricted Packaging Electives – 6 credit hours
    Choose 2 courses from:
    __ SBIO 2214 Design Fundamentals for Packaging (3) (Pre: SBIO 2104)
    __ SBIO 3104 Packaging Design Applications (3) (Pre: 2214)
    __ SBIO 3244 Packaging Machinery and Production Systems (3) (Pre: SBIO 2104)

V. Packaging Experiential Learning – 3 credits
    Choose 1 course from:
    __ SBIO 3005 Sustainable Packaging Design and Innovation I (3)
    __ SBIO 3006 Sustainable Packaging Design and Innovation II (3)
    __ SBIO 3954 Field Study (3)
    __ SBIO 4994 Undergraduate Research (3)
    __ XXXX 3954 Study Abroad (3)
Free electives – 17 credit hours

Pathways Requirements – 46 credit hours

Pathways Concept 1: Discourse (6 foundational credit hours, 3 applied/advanced credits)
- ENGL 1105 First-year Writing (foundational (3)
- ENGL 1106 First-year Writing (foundational (3) (Pre: ENGL 1105)
- ENGL 3764 Technical Writing (applied/advanced) (3) (Pre: Junior standing; ENGL 1106 or 1204H or COMM 1016)

Pathways Concept 2: Critical Thinking in the Humanities (6 credit hours)
- Concept 2 course: 

Pathways Concept 3: Reasoning in the Social Sciences (6 credit hours)
- ECON 2005 Principles of Economics (3)

Pathways Concept 4: Reasoning in the Natural Sciences (7 credit hours)
- BIOL 1105 Principles of Biology (3) (Co: BIOL 1115)
- CHEM 1035 General Chemistry (3)
- CHEM 1045 General Chemistry Laboratory (1) (Co: CHEM 1035)

Pathways Concept 5: Quantitative and Computational Thinking (6 foundational credit hours, 3 Applied/Advanced credit hours)
- MATH 1025 Elementary Calculus (foundational) (3)
- STAT 2004 Introductory Statistics (foundational) (3) (Pre: MATH 1014 or MATH 1025 or MATH 1225 or MATH 1524 or MATH 1525)
- SBIO 2504: Circular Economy Analytics for Sustainable Systems (applied/advanced) (3) (Pre: MATH 1025 or MATH 1524 or MATH 1535 or MATH 1525)

Pathways Concept 6: Critique and Practice in Design and the Arts (6 credit hours)
- Choose a 3-credit DESIGN or INTEGRATED course for the approved list 
- Choose a 3-credit ART or INTEGRATED course for the approved list 

Pathways Concept 7: Critical Analysis of Identity and Equity in the United States (3 credit hours) – may be double-counted with another core outcome or major requirement
- Concept 7 course 

Satisfactory Progress
By the end of the semester in which the student has attempted 60 hours (including transfer, advanced placement, advanced standing, and credit by examination), "satisfactory progress" towards a B.S. degree in the College of Natural Resources and Environment will include the following minimum criteria:
- Having a grade point average of at least 2.0
- Passing at least 24 semester credits that apply to the Curriculum for Liberal Education
- Passing the required 1000-level courses in Biology, Chemistry, English, and Math

Foreign Language Requirement]
- 2 years of one language in high school

OR
- FL 1105 and 1106 if less than two years of one language in high school
Sequencing
Some courses listed on this checksheet may have pre-/co-requisites; please consult the University Course Catalog or check with your advisor. Courses should be taken in a sequence that ensures that prerequisite or corequisite requirements are met. Free elective courses may also have prerequisite requirements. Students should plan ahead and ensure that they have completed prerequisites or are enrolled in corequisite courses.

In-major GPA computation
Includes all courses designated SBIO. The acceptable minimum is 2.0.