Outcome Assessment Timeline

Academic Programs

Landscape Nursery Tech

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| **APR /SLO 4-Year Cycle** | **2022-2026** | | |
| **Course ID** | **Course-Level Student Learning Outcome (CSLO)** | **Measure/Collect Data** | **Discuss & Plan** |
| **LNT 70** | Student will recognize the wide variety of fruiting plants and analyze the appropriate method of pruning to achieve plant health and maximum fruit production. (LNT 70; ISLO 4) | Spring 2023 | Fall 2025 |
| Student will apply proper pruning techniques while improving the structure and fruiting abilities of actual live fruit trees. (LNT 70; ISLO 6) | Spring 2023 | Fall 2025 |
| **LNT 72** | Student will assemble and apply the various safety requirements when operating horticultural equipment. (LNT 72; ISLO 5) | Fall 2023 | Fall 2025 |
| Student will assemble information from various equipment manufacturers and write a report on one piece of equipment that compares the features provided by the different manufacturers. (LNT 72; ISLO 7) | Fall 2023 | Fall 2025 |
| **LNT 75** | While visiting an actual residential site, student will evaluate the best location for a residential pond and then estimate the material needed for the complete installation of the pond. | Fall 2023 | Fall 2025 |
| Student will visit an existing pond and assess its health and physical condition. Student will then propose a yearly maintenance schedule to facilitate the best possible environment for plants, fish, and for ornamental value. (LNT 75; ISLO 6) | Fall 2023 | Fall 2025 |
| **LNT 85** | Student will use the pesticide laws and regulation information and pass the California Pesticide License Laws and Regulations Exam and the Landscape Maintenance Category Exam. (LNT 85; ISLO 5) | Fall 2023 | Fall 2025 |
| Students will properly calculate the amount of pesticide to apply to various pest situations. (LNT 85; ISLO 6) | Fall 2023 | Fall 2025 |
| **LNT 94** | Using a landscape plan that shows both the sprinkler system and the plants it will be irrigating, program the irrigation controller and determine the proper run times for each station on the controller based on the plant's water needs, the soil, the climate of the region, and the micro-climate around the plant. Develop your irrigation scheduling plan and present this to the class. Your plan should include station run times, days of station operation, and suggested split-cycling if needed. (LNT 94; ISLO 6) | Fall 2022 | Fall 2025 |
| Using a typical lawn area, turn on the sprinklers and observe any problems that exist or any adjustments that need to be made. Make all need repairs and adjustments to insure a properly performing sprinkler system. Your fellow students will observe the final product and make any needed suggestions for improvement. (LNT 94; ISLO 6) | Fall 2022 | Fall 2025 |
| With your group members and using the data your group collected while performing a catch-can test on the irrigation system of a turf grass area, calculate the coefficient of uniformity number. Once determined, indicate whether or not this result shows an properly performing system. It not, summarize your suggestions for improving this area. Each member of the group must turn in their own separate paper. (LNT 94; ISLO 5) | Fall 2022 | Fall 2025 |
| **LNT 95** | LNT95 SLO #1 Having been assigned a specific topic, student will interview a classmate to determine the 'floral needs' for a given event. | Fall 2022 | Fall 2025 |
| LNT95 SLO #2 Based on a pre-described format,student will compile a personal portfolio of their floral design work, to include: resume, letter of introduction, photos of designs, letters of recommendation and 'thank you' notes. | Fall 2022 | Fall 2025 |
| **LNT 99** | Student will describe concepts and demonstrate techniques used in organic gardening. (LNT 99; ISLO 2) | Spring 2023 | Fall 2023 |
| Student will describe elements of a balanced ecosystem and identify their function in an organic garden. (LNT 99; ISLO 13) | Spring 2023 | Fall 2023 |
| **LNT 100** | Students will demonstrate knowledge of basic plant anatomy through correctly identifying plant organs and tissues, and describing their function. (LNT 100; ISLO 6) | Fall 2022 | Fall 2025 |
| Students will demonstrate understanding of proper horticultural techniques for the design installation and maintenance of edible and ornamental landscapes. (LNT 100; ISLO 5) | Fall 2022 | Fall 2025 |
| Students will demonstrate understanding of proper horticulture through the critical examination of an existing landscape. In a written assignment, students will describe the cultural problems shown and provide recommendations to correct them. (LNT 100; ISLO 5) | Fall 2022 | Fall 2025 |
| **LNT 101** | Analyze data obtained by smart meter and develop energy saving strategies. (LNT 101; ISLO 5) | Fall 2022 | Fall 2025 |
| Student will identify different areas of study in the field of sustainable practices. (LNT 101; ISLO 3) | Fall 2022 | Fall 2025 |
| Apply energy codes and evaluate energy consumption of both existing and proposed construction using H.E.R.S rating system. (LNT 101; ISLO 6) | Fall 2022 | Fall 2025 |
| Identify natural and made-made environmental issues that affect climate change for local and world economies. (LNT 101; ISLO 11) | Fall 2022 | Fall 2025 |
| Identify the technological skills and certifications required for careers in sustainability. (LNT 101; ISLO 8) |  |  |
| **LNT 105**  Note: This course has not been offered since 2016. Faculty will discuss course discontinuance during the Spring 2023 term. | Student will compile a list of appropriate trees for each of the various landscape situations such as shade providing, flowering effects, fragrance, fruit appeal, edible fruits, drought tolerance, and minimum maintenance needs. (LNT 105; ISLO 5) |  |  |
| Student will identify the tree leaf, flower, and fruiting samples and provide the correct scientific and common names - properly spelled. (LNT 105; ISLO 6) |  |  |
| **LNT 109**  Note: This course has not been offered since 2016. Faculty will discuss course discontinuance during the Spring 2023 term. | Student will compile a list of appropriate trees for each of the various landscape situations such as shade providing, flowering effects, fragrance, fruit appeal, edible fruits, drought tolerance, and minimum maintenance needs. (LNT 109; ISLO 5) |  |  |
| Student will identify the shrub leaf, flower, and fruiting samples and provide the correct scientific and common names - properly spelled (LNT 109; ISLO 6) |  |  |
| **LNT 118** | Based on observation, student will memorize the scientific and common name of 100 cut flowers and foliages, and identify by viewing samples. (LNT 118; ISLO 5) | Fall 2022 | Fall 2025 |
| Using a pre-described format, student will compile an identification sheet for each of the 100 cut flowers and foliaged covered, and embellish it with a photo/pressed sample/drawing, for future presentation to others. (LNT 118; ISLO 2) | Fall 2022 | Fall 2025 |
| **LNT 119**  Note: This course has not been offered since 2016. Faculty will discuss course discontinuance during the Spring 2023 term. | Using a pre-described format, student will compile an identification sheet for each of the 120 drought tolerant plants covered, and embellish it with photo/pressed sample/drawing, for future presentation to others. |  |  |
| Based on observation, student will memorize the scientific and common name of 120 drought tolerant plants, and identify by viewing samples. |  |  |
| **LNT 120** | LNT120 SLO #1 Student will present a landscape design to their classmates explaining how they developed their design concept, how they derived the plant layout, where they incorporated sustainable practices, and answer questions regarding the decisions they made in this project. | Fall 2022 | Fall 2025 |
| LNT120 SLO #2 In small groups, students will visit a home site and evaluate the environmental conditions that exist. With said information, the group will provide the homeowner with an appropriate landscape plan that is functional, aesthetic, and sustainable. | Fall 2022 | Fall 2025 |
| **LNT 122** | After developing a complete set of landscape plans, the student will present and defend their design ideas to the client or to the rest of the class. (LNT 122; ISLO 2) | Spring 2023 | Fall 2025 |
|  | Student will synthesize information from client interviews to establish parameters in which to create a successful landscape design. | Spring 2023 | Fall 2025 |
| **LNT 123** | Given an existing residential landscape, the student will develop a one year plan for the total work required and supplies needed to properly maintain the landscape. (LNT 123; ISLO 6) | Spring 2023 | Fall 2025 |
| **LNT 124** | Students will analyze lumber type and determine best uses, advantages and disadvantages when used outdoors, their long term life span and environmental impact. (LNT 124; ISLO 3) | Fall 2022 | Fall 2025 |
| Students will create a project proposal for a concrete patio plot and present and justify their findings to the class. (LNT 124; ISLO 5) | Fall 2022 | Fall 2025 |
| **LNT 128** | Students will analyze a landscape site and properly design an efficient and functional irrigation system that properly applies and conserves water according to local water ordinances. (LNT 128; ISLO 6) | Fall 2023 | Fall 2025 |
| Students will calculate hydraulic formulas of water pressure, water velocity, water hammer, coefficient of uniformity, and precipitation rates. These calculations are imperative in the proper design and operation of landscape irrigation systems. (LNT 128; ISLO 5) | Fall 2023 | Fall 2025 |
| **LNT 129** | Student will perform, on an existing landscape, a professional water audit and provide a written report on their findings along with recommendations water savings. (LNT 129; ISLO 5) | Fall 2023 | Fall 2025 |
| Student will perform, on an existing landscape, a professional landscape audit and provide a written report on their findings along with recommendations for sustainable improvements. (LNT 129; ISLO 5) | Fall 2023 | Fall 2025 |
| **LNT 131** | LNT131 SLO #1 Student will demonstrate a solid knowledge of the laws and regulations that pertain to a licensed landscape contractor. | Fall 2022 | Fall 2025 |
| LNT131 SLO #2 Using landscape construction blueprints, the student will calculate the required materials, labor, equipment, and other costs involved in a landscape installation project. The student will then calculate the required overhead and profit markups and determine a final bid price for the project. | Fall 2022 | Fall 2025 |
| **LNT 134** | Student will appraise local soil quality as affected by human and natural activities and develop recommendations for soil conservation and sustainable soil management. (LNT 134; ISLO 13) | Fall 2023 | Fall 2025 |
| Student will execute best practice soil sampling, testing, and analysis. (LNT 134; ISLO 5) | Fall 2023 | Fall 2025 |
| **LNT 136** | define "Integrated Pest Management" and describe its importance in safe, economically viable, and ecologically sound landscape management practices. (LNT 136; ISLO 13) | Fall 2023 | Fall 2025 |
| diagnose and prescribe prevention and treatment strategies of plant disorders including weed control, insect and vertebrate pests, diseases, and abiotic disorders. (LNT 136; ISLO 5) | Fall 2023 | Fall 2025 |
| **LNT 138** | Given flower prices, students will analyze a floral arrangement, and accurately price that design to make a profit. (LNT 138; ISLO 5) | Fall 2022 | Fall 2025 |
| Based on observation of a design demonstration, student will construct a round arrangement. (LNT 138; ISLO 5) | Fall 2022 | Fall 2025 |
| **LNT 140** | Through research of design, student will present arrangement to class and provide an interpretation of their use of principles, elements, and techniques. (LNT 140; ISLO 2) | Spring 2023 | Fall 2025 |
| Based on observation of a design demonstration, student will construct and present a casket spray. (LNT 140; ISLO 5) | Spring 2023 | Fall 2025 |
| **LNT 141** | LNT141 SLO #1 Having developed a theme floral design, student will present the arrangement to the class, and provide an interpretation of the creation. | Fall 2022 | Fall 2025 |
| LNT141 SLO #2 Given a specific design assignment, student will identify components of the theme, and assemble a floral design that reflects said theme. | Fall 2022 | Fall 2025 |
| **LNT 146** | Student will demonstrate the ability to propagate plants from seed, cuttings, budding, grafting, layering, division, and tissue culture. (LNT 146; ISLO 5) | Spring 2023 | Fall 2025 |
| Student will exhibit the personal skills necessary for successful employment in the wholesale nursery business. (LNT 146; ISLO 9) | Spring 2023 | Fall 2025 |
| **LNT 147** | Student will interview a prospective bride and, after assessing their wedding needs, develop a complete wedding plan to meet their needs. (LNT 147; ISLO 5) | Fall 2023 | Fall 2025 |
| Student will interview and plan a floral event (business conference, birthday party, graduation event) and price the job for the appropriate profit. (LNT 147; ISLO 5) | Fall 2023 | Fall 2025 |
| **LNT 148** | Students (in groups of 4 or 5) will compose and assemble a business plan for a landscape, nursery, or floral business. (LNT 148; ISLO 2) | Fall 2022 | Fall 2025 |
| Student will examine and comprehend the wide variety of skills required to operate or manage a sole proprietor business. (LNT 148; ISLO 4) | Fall 2022 | Fall 2025 |
| **LNT 151** | Student will assemble plant lists for each of the various functional and aesthetic landscape uses such as shade providing, flowering effects, fragrance, fruit appeal, edible fruits, drought tolerance, and minimum maintenance needs. (LNT 151; ISLO 14) | Spring 2023 | Fall 2025 |
| Student will develop a portfolio of climate appropriate plants to be shared with future clients and collaborators. (LNT 151; ISLO 2) | Spring 2023 | Fall 2025 |
| Student will identify landscape plants by leaf, flower, fruit, and bark samples, providing the correct scientific and common names, and determine their ecological impact on the local environment. (LNT 151; ISLO 13) | Spring 2023 | Fall 2025 |
| **LNT 152** | Student will assemble plant lists for each of the various functional and aesthetic landscape uses such as shade providing, flowering effects, fragrance, fruit appeal, edible fruits, drought tolerance, and minimum maintenance needs. (LNT 152; ISLO 14) | Fall 2022 | Fall 2025 |
| Student will develop a portfolio of climate appropriate plants to be shared with future clients and collaborators. (LNT 152; ISLO 2) | Fall 2022 | Fall 2025 |
| Student will identify landscape plants by leaf, flower, fruit, and bark samples, providing the correct scientific and common names, and determine their ecological impact on the local environment. (LNT 152; ISLO 13) | Fall 2022 | Fall 2025 |
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|  | | | |  | **Measure/Collect Data** | **Discuss & Plan** |
| **Program** | **Program-Level Student Learning Outcome (PSLO)** |  |  |