Outcome Assessment Timeline

Academic Programs

Landscape & Nursery Technology / Landscape Architecture

| **APR /SLO 3-Year Cycle** | **2022-2025** |
| --- | --- |
| **Course ID** | **Course-Level Student Learning Outcome (CSLO)** | **Measure/Collect Data** | **Discuss & Plan** |
| LA 104 | Using the drawing and rendering techniques learned in class, student will complete a rendered landscape design portfolio that graphically conveys the look of professionally created landscape plans. | Fall 2022 | Fall 2025 |
| LA 200 | Student will obtain residential site data and incorporate that data into the AutoCAD computer program for use in the landscape design process. | Fall 2022 | Fall 2025 |
| Using AutoCAD commands and skill learned, student will complete an entire computer-generated landscape design plan including planting plan, sprinkler plan, legends, and details. | Fall 2022 | Fall 2025 |
| LA 201 | After learning the use of advance computer landscape software, the student will complete a portfolio of landscape plans and presentation drawings created on the computer. | Spring 2023 | Fall 2025 |
| 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. | Spring 2023 | Fall 2025 |
| Student will apply proper pruning techiques while improving the structure and fruiting abilities of actual live fruit trees. | Spring 2023 | Fall 2025 |
| LNT 72 | Student will assemble and apply the various safety requirements when operating horticultural equipment. | Fall 2023 | Fall 2025 |
| Student will assemble and apply the various safety requirements when operating horticultural equipment. | 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. | 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. | Fall 2023 | Fall 2025 |
| Students will properly calculate the amount of pesticide to apply to varioius pest situations. | Fall 2023 | Fall 2025 |
| LNT 94 | 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. | 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. | Fall 2022 | Fall 2025 |
| 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. | Fall 2022 | Fall 2025 |
| LNT 95 | Having been assigned a specific topic, student will interview a classmate to determine the 'floral needs' for a given event. | Fall 2022 | Fall 2025 |
| 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. | Fall 2022 | Fall 2025 |
| Student will describe elements of a balanced ecosystem and identify their function in an organic garden. | Fall 2022 | Fall 2025 |
| LNT 100 | Students will demonstrate knowledge of basic plant anatomy through correctly identifying plant organs and tissues, and describing their function. | Fall 2022 | Fall 2025 |
| Students will demonstrate understanding of proper horticultural techniques for the design installation and maintenance of edible and ornamental landscapes. | Fall 2022 | Fall 2025 |
| LNT 101 | Student will identify different areas of study in the field of sustainable practices. | Fall 2022 | Fall 2025 |
| Analyze data obtained by smart meter and develop energy saving strategies. | Fall 2022 | Fall 2025 |
| Apply energy codes and evaluate energy consumption of both existing and proposed construction using H.E.R.S rating system | Fall 2022 | Fall 2025 |
| Identify natural and made-made environmental issues that affect climate change for local and world economies. | Fall 2022 | Fall 2025 |
| Identify the technological skills and certifications required for careers in sustainability. | Fall 2022 | Fall 2025 |
| LNT 105Note: 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. |  |  |
| Student will identify the tree leaf, flower, and fruiting samples and provide the correct scientific and common names - properly spelled. |  |  |
| LNT 109Note: 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. |  |  |
| Student will identify the shrub leaf, flower, and fruiting samples and provide the correct scientific and common names - properly spelled. |  |  |
| LNT 113Note: This course has not been offered since 2016. Faculty will discuss course discontinuance during the Spring 2023 term. | Student will identify the herbaceous plant leaf, flower, and fruiting samples and provide the correct scientific and common names - properly spelled. |  |  |
| 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 116Note: This course has not been offered since 2016. Faculty will discuss course discontinuance during the Spring 2023 term. | Using the knowledge obtained in class, the student will design a functional and pleasing landscape plan that contains ornamental plants that provide edible fruits for the homeowner. |  |  |
| LNT 117Note: 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 tropical plant covered, and embellish it with a photo/pressed sample/drawing for future presentation to others. |  |  |
| Based on observation, student will memorize the scientific and common name of 40 tropical plants and identify them by viewing samples. |  |  |
| LNT 118 | Using a pre-described format, student will compile an identification sheet for each of the 100 cut flowers and foliages covered, and embellish it with a photo/pressed sample/drawing computer based collection, for future presentation to others. | Fall 2022 | Fall 2025 |
| Based on observation, student will memorize the scientific and common name of 100 cut flowers and foliages, and identify by viewing samples. | Fall 2022 | Fall 2025 |
| LNT 119Note: 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 | 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 |
| 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. | 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. | 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. | Fall 2022 | Fall 2025 |
| Students will create a project proposal for a concrete patio plot and present and justify their findings to the class. | Fall 2022 | Fall 2025 |
| Students will calculate the proper sizing of various components of a residential deck that will safely carry the load of the structure itself and the people using it. | Fall 2022 | Fall 2025 |
| LNT 128 | Students will analyze a landscape site and properly design an efficient and functional irrigaion system that properly applies and conserves water according to local water ordinances. | 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. | Fall 2023 | Fall 2025 |
| LNT 129 | 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. | Fall 2023 | Fall 2025 |
| Student will perform, on an existing landscape, a professional water audit and provide a written report on their findings along with recommendations water savings. | Fall 2023 | Fall 2025 |
| LNT 131 | 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 |  |
| Student will demonstrate a solid knowledge of the laws and regulations that pertain to a licensed landscape constractor. | Fall 2022 |  |
| LNT 132 | The student will be able to analyze existing turfgrass plantings and produce a maintenance schedule that will improve the appearance, quality, and playability of the area. | Fall 2023 | Fall 2025 |
| Student will be able to properly evaluate existing turfgrass problems, formulate methods of solving these problems, and implement the changes to improve the turfgass area. | Fall 2023 | Fall 2025 |
| LNT 134 | Student will execute best practice soil sampling, testing, and analysis. | Fall 2023 | Fall 2025 |
| Student will appraise local soil quality as affected by human and natural activities and develop recommendations for soil conservation and sustainable soil management. | Fall 2023 | Fall 2025 |
| LNT 136 | diagnose and prescribe prevention and treatment strategies of plant disorders including weed control, insect and vertebrate pests, diseases, and abiotic disorders. | Fall 2023 | Fall 2025 |
| define "Integrated Pest Management" and describe its importance in safe, economically viable, and ecologically sound landscape management practices. | Fall 2023 | Fall 2025 |
| LNT 138 | Given flower prices, students will construct a floral arrangement, and accurately price that design to make a profit. | Fall 2022 | Fall 2025 |
| Based on observation of a design demonstration, student will construct a round arrangement. | 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. | Spring 2023 | Fall 2025 |
| Based on observation of a design demonstration, student will construct a shop window presentation. | Spring 2023 | Fall 2025 |
| LNT 141 | Having developed a themed floral design, student will present the arrangement to the class, and provide an interpretation of the creation. | Fall 2022 | Fall 2025 |
| 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 143Note: This course has not been offered since 2016. Faculty will discuss course discontinuance during the Spring 2023 term. | Given an established germination % for a specific crop, student will calculate the number of seeds necessary to ensure a specific crop size. |  |  |
| Based on historical data of tree and shrub production, student will create a two year timeline for the production of a given tree or shrub crop. |  |  |
| LNT 144Note: This course has not been offered since 2016. Faculty will discuss course discontinuance during the Spring 2023 term. | Based on discussion of plant requirements for interior settings, student will evaluate a specific room and select plants that would be appropriate for the location. |  |  |
| Given the types of pest and disease problems that are common on interior plants, student will evaluate the health of a plant and prescribe a suitable pest control for that plant and its setting. |  |  |
| LNT 146 | Student will demonstrate the ability to propagate plants from seed, cuttings, budding, grafting, layering, division, and tissue culture. | Spring 2023 | Fall 2025 |
| Student will exhibit the personal skills necessary for successful employment in the wholesale nursery business. | 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. | 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. | 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. | Fall 2022 | Fall 2025 |
| Student will examine and comprehend the wide variety of skills required to operate or manage a sole proprietor business. | Fall 2022 | Fall 2025 |
| LNT 151 | Student will develop a portfolio of climate appropriate plants to be shared with future clients and collaborators. | 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. | Spring 2023 | Fall 2025 |
| 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. | Spring 2023 | Fall 2025 |
| LNT 152 | Student will develop a portfolio of climate appropriate plants to be shared with future clients and collaborators. | 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. | Fall 2022 | Fall 2025 |
| 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. | Fall 2022 | Fall 2025 |
|  |
| **Program** | **Program-Level Student Learning Outcome (PSLO)** | **Measure/Collect Data** | **Discuss & Plan** |
| Environmental Horticulture A.S. 02604 | Demonstrate a breadth of horticultural knowledge while also creating awareness of green industry careers and modern workplace skills. | 2022 - 2025 | Fall 2025 |
| Apply horticultural knowledge and skills to meet the economic, social, and environmental needs of our diverse bioregion. | 2022 - 2025 | Fall 2025 |
| Floral Design A.S. 02821Note: This program has been discontinued.  | Graduates of this program will interview a prospective bride, present floral design themes, and justify the budget for the flowers for a wedding. |  |  |
| Graduates of this program will understand the different requirements of planning the floral needs of funerals for varying ethnic cultures. |  |  |
| Graduates of this program will be able to plan, organize, and develop a budget for the floral arrangements for convention or business event. |  |  |
| Floral Design C.A. 02823 | Create floral arrangements for a variety of occasions implementing the foundational principles and elements of design. | 2022 - 2025 | Fall 2025 |
| Investigate and select floral design elements appropriate for diverse religious and cultural occasions. | 2022 - 2025 | Fall 2025 |
| Golf and Sports Turf Management A.S. 02601Note: This program has been discontinued.  | Degree student will demonstrate the ability to work with a wide variety of individuals and will present ideas and proposals in a clear and concise manner. |  |  |
| Degree student will analyze an existing turfgrass problem and will be able to formulate a plan to solve the problem. |  |  |
| Degree student will present ideas, job tasks, and job duties to their fellow employees in a manner that effectively results in the desired outcome. |  |  |
| Golf and Sports Turf Management C.A. 02602 | Certificate students will present ideas, job tasks, and job duties to their fellow employees in a manner that effectively results in the desired outcome. | 2022 - 2025 | Fall 2025 |
| Certificate students will analyze an existing turfgrass problem and will be able to formulate a plan to solve the problem. | 2022 - 2025 | Fall 2025 |
| Graduates of this program will be able to communicate to the supervisors or owners above them their annual plan, budget, and goals. | 2022 - 2025 | Fall 2025 |
| Landscape Architecture A.S. 02610 | Gradutes of this program will assess the needs of a landscape design project, present those needs and solutions to the class, and defend their design ideas. | 2022 - 2025 | Fall 2025 |
| Graduates of this program will have actively participated in round-table discussions of various design theories, their applicable uses in the environment, and will assess how they have incorporated others ideas into their design philosophies. | 2022 - 2025 | Fall 2025 |
| Graduates of this program will work together during group projects, group presentations, and work together in defending the groups ideas and designs. | 2022 - 2025 | Fall 2025 |
| Landscape Architecture C.A. 02611 | Certificate student will identify and analyze landscape situations and propose ideas for the enhancement, beautification, and functionality of the landscape. | 2022 - 2025 | Fall 2025 |
| Certificate student will analyze the costs involved in a landscape construction project and perform a landscape bid which encompassed the overhead and profit margins. | 2022 - 2025 | Fall 2025 |
| Landscape Occupations A.S. 02600Note: This program has been discontinued.  | Degree student will identify and analyze landscape situations and propose ideas for the enhancement, beautification, and functionality of the landscape. |  |  |
| Degree student will analyze the costs involved in a landscape construction project and perform a landscape bid which encompasses the overhead and profit margins. |  |  |
| Landscape Occupations C.A. 02603Note: This program has been discontinued.  | Certificate student will identify and analyze landscape situations and propose ideas for the enhancement, beautification, and functionality of the landscape. |  |  |
| Certificate student will analyze the costs involved in a landscape construction project and perform a landscape bid which encompassed the overhead and profit margins. |  |  |
| Retail Nursery and Plant Production A.S. 02822Note: This program has been discontinued.  | Graduates of this program will analyze a plant problem, identify the cause of the problem, and suggest methods for correction. |  |  |
| Graduates of this program, with a group of 3 others, will plan the steps needed to propagate and grow a commercial nursery crop. The group will work together to create a flow chart that tracks the appropriate steps to take this crop from seed to sales. |  |  |
| Retail Nursery and Plant Production C.A. 02824 | Graduates of this program will understand the different requirements of planning the floral needs of funerals for varied ethnic cultures. | 2022 - 2025 | Fall 2025 |
| Graduates of this program will be able to plan, organize, and develop a budget for the floral arrangements for convention or business event. | 2022 - 2025 | Fall 2025 |
| Sustainable Landscape Practices A.S. 02612Note: This program has been discontinued.  | When provided a set of landscape design drawing, the graduate of this program will analyze and recommend design, installation, and maintenance practices that are not only sustainable, but fall within the local codes of the City of Chula Vista. |  |  |
| Graduates of this program will be able to perform a complete water audit and compile their results in a written format. The graduate will be able to make recommendations for the programming and improvement of the irrigation system to save water and prevent water loss from the property. |  |  |
| Sustainable Landscape Practices C.A. 02613 | After performing a complete irrigation audit of a residential sprinkler system, write a complete analysis of your findings and also compose a report of ways in which the irrigation system can be adjusted, improved, or repaired to more efficiently apply water. | 2022 - 2025 | Fall 2025 |
| Visit a typical San Diego landscape and perform a complete sustainable landscape audit. In the form of a written report, highlight the positive sustainable practices currently in use and also suggest methods in which the site can become more sustainable. | 2022 - 2025 | Fall 2025 |
| Water Management and Irrigation Skills Certificate of Proficiency 02200 | The student will be presented with an irrigation system that is exhibiting some problem. Using the methodology learned to pin-point irrigation problems, the student will find the irrigation malfunction and then fix the problem using standard and approved correction methods. Other students will observe and make suggestions for improvement. | 2022 - 2025 | Fall 2025 |
| Using an existing lawn, the student will preform a catch-can water test to determine the uniformity of water application to the area. Once completed, the student will provide recommendation as to methods in which to improve the water application uniformity of the area. These recommendations will be made in the form of a written report. | 2022 - 2025 | Fall 2025 |