



**Jordan University of Science and Technology**  
**Faculty of Agriculture**  
**Plant Production Department**

PP323 Landscape Plants

First Semester 2020-2021

**Course Catalog**

3 Credit Hours. This a 3-credit hour, specialization elective course. It is given as two 1-hour lectures and one 3-hour laboratory. The course covers the following topics: principles and practices of production of bedding, bulbous, and foliage plants and major and specialty cut flowers. For each cut flower crop, classification, morphology, propagation, stock plants, environmental factors affecting vegetative growth and flowering, physiological disorders, harvesting, postharvest handling, scheduling, and cultivars will be discussed.

**Text Book**

<b>Title</b>	Introduction to Floriculture
<b>Author(s)</b>	Larson, R.A. ed
<b>Edition</b>	2nd Edition
<b>Short Name</b>	Ref. #1
<b>Other Information</b>	1992, Academic Press.

**Course References**

Short name	Book name	Author(s)	Edition	Other Information
Ref. #2	Specialty Cut Flowers: The Production of Annuals, Perennials, Bulbs, and Woody Plants for Fresh and Dried Cut Flowers	Armitage, A. M. and J. M. Laushman.	2nd Edition	2003, Timber Press
Ref. #3	Introduction to Floriculture	Caroline Harrington	1st Edition	2019 LARSEN & KELLER EDUCATION.
Ref. #4	Floriculture: Principles and Species	Dole, J. and H. Wilkins.	2nd Edition	2004, Prentice Hall

**Instructor**

Name	Dr. Mohammad Al Salem
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Office Location	M1 L2
Office Hours	
Email	mmalsalem2@just.edu.jo

Class Schedule & Room
Section 1: Lecture Time: Sun, Tue : 10:00 - 11:00 Room: منصة الكترونية

Prerequisites		
Line Number	Course Name	Prerequisite Type
622240	PP224 Plant Physiology	Prerequisite / Study

Tentative List of Topics Covered		
Weeks	Topic	References
Weeks 1, 2	Floriculture, Definition & Importance, Bedding Plants, Definition, classification, planning for future crop, propagation, transplanting, growing conditions, growth retardants, handling.	<b>Ch. 20+Handouts</b> From <b>Ref. #1</b>
Week 3	Foliage Plants Definition, classification, stock plant culture, propagation, culture, physiological disorders, handling. Material not required: origin & development of industry, production areas, economic importance, flower types, prominent cultivars, economic aspects of stock plants, breeding programs, consumer care of products.	<b>Ch. 22</b> From <b>Ref. #1</b>
Weeks 4, 5	Bulbous & Tuberous Plants Definition, underground structures, factors affecting flower formation and development, forcing system phases, growth regulators. Material not required: forcing of specific crops, physiological disorders, handling of marketable products.	<b>Ch. 8</b> From <b>Ref. #1</b>
Weeks 6, 7	Chrysanthemum ( <i>Dendranthema grandiflorum</i> ) Morphology, classification, propagation, vegetative growth, flowering, scheduling year-round flowering & natural season flowering, growth regulators, harvesting, postharvest handling. Material not required: details in mineral nutrition, physiological disorders.	<b>Ch. 1</b> From <b>Ref. #1</b>
Week 8	Carnation ( <i>Dianthus caryophyllus</i> ) Morphology, propagation, vegetative growth, flowering, harvesting, postharvest handling, physiological disorders, scheduling. Material not required: world production centers.	<b>Ch. 2</b> From <b>Ref. #1</b>
Week 9	Rose ( <i>Rosa x hybrida</i> ) Morphology, classification, propagation, culture, physiological disorders, harvesting, postharvest handling. Material not required: history, cultivar development.	<b>Ch. 3</b> From <b>Ref. #1</b>
Week 10	Gladiola ( <i>Gladiolus hybrida</i> ) Taxonomy, propagation, flowering stock culture, harvesting, postharvest handling, scheduling. Material not required: historical background, prominent cultivars, details on cormel production, consumer care of flowers.	<b>Ch. 6</b> From <b>Ref. #1</b>
Week 11	Gerbera ( <i>Gerbera jamesonii</i> ) Morphology, propagation, culture, harvesting, physiological disorders, scheduling.	<b>Part 2</b> From <b>Ref. #4</b>
Week 11	Bird of Paradise ( <i>Strelitzia reginae</i> ) Propagation, culture, physiological disorders, scheduling.	<b>Handouts</b> From <b>Ref. #2</b>

Week 12	Lisianthus ( <i>Eustoma grandiflorum</i> ) Propagation, growing-on, environmental factors, field & greenhouse performance, harvesting, postharvest.	<b>P279-289</b> From Ref. #2
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<b>Mapping of Course Outcomes to Program Student Outcomes</b>	<b>Course Outcome Weight (Out of 100%)</b>	<b>Assessment method</b>
Describe the value and importance of ornamental plants, floriculture industry and market. [10PLO1]	10%	
Give scientific, technical, & practical background on production of bedding plants, foliage plants, flowering bulbous plants, some major and specialty cut flower crops. [20PLO1]	20%	
Learn detailed information about bedding plants types, sowing times, scheduling, seed germination, transplanting, care, and handling. [5PLO1, 5PLO2, 5PLO6]	15%	
Define, classify, identify, and propagate foliage plants. Determine the cultural requirements for growth, acclimatize, grade, and ship foliage plants. [5PLO3, 10PLO4, 5PLO6]	20%	
Identify different flowering bulbous plants, apply different forcing systems to produce cut flowers or pot plants from bulbs. [3PLO3, 9PLO4, 3PLO6]	15%	
Propagate, produce, and perform proper cultural practices for growth and flowering of major and specialty cut flower crops. Schedule production, harvest, and determine postharvest handling, important diseases, insects and physiological disorders, insects of these crops. [5PLO3, 5PLO4, 5PLO5, 5PLO6]	20%	

<b>Relationship to Program Student Outcomes (Out of 100%)</b>						
PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7
35	5	13	24	5	18	

<b>Policy</b>	
Attendance:	All students are expected to attend every class meeting, scheduled lectures, online activities, and exams on time. Attendance is taken at all lectures. Failure to attend can result in a student being dismissed from the course with a failure score (F) if the absent percentage exceeded 20% of the total number of lectures in the semester. Students who miss any lecture are personally responsible for learning any missed materials or assignments, either from their classmates or from the course eLearning site. Two tardy arrivals will count as one absence.
Examination:	First, second and final examinations must be given at the time specified by admission and registration unit in the university. This applies for all examinations, whether an on-campus or an online exam. No changes in examination dates. No make-up examinations except with official medical reports approved by the dean of the faculty of agriculture. The instructor can verify the identity of the students in the exam room by requesting student university ID. If a student is unavoidably absent from any examination, university regulations will be applied. Graded exams will be given back to students and the questions will be answered and discussed with the students in class or online.

<p>Cheating, Plagiarism and Academic Dishonesty:</p>	<p>Any student who attempts to cheat will be asked to hand over the exam immediately and will be reported to the department head. The case will be handled in accordance with the university's regulations, which include disciplinary penalties as well as the possibility of failure in the course and/or dismissal from the University.</p> <p>Students are expected to complete their assignments themselves. Any kind of plagiarism is prohibited. The university's regulations also apply if there is academic dishonesty and plagiarism of assignment during the course.</p>
<p>Class participation:</p>	<p>Participating in classroom discussion, online discussions, or any type of collaborating in various forms such as forming study groups, helping your classmate with studying are highly encouraged. A student who actively participates in class discussion may receive up to 2% bonus added to the final grade.</p>
<p>Electronic devices:</p>	<p>Electronic devices of any kind (smartphones, tablets, or laptops) must be turned off (without vibration or even silent mode), they should not be seen in the students hands, and they should not be tampered with during class. As an exception, these devices may only be triggered when indicated and used only for illustrative purposes during the teaching process. If you fail to comply with this policy, you will be dismissed on that day and you will be recorded as absent for this class.</p>
<p>Course withdrawal:</p>	<p>Students can only formally withdraw from classes by submitting the online withdrawal form available on the student services portal or at the registration unit according to the university regulations.</p>

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