ARIZONA STATE UNIVERSITY

GENERAL STUDIES COURSE PROPOSAL COVER FORM

Course information:

*Copy and paste **current** course information from Class Search/Course Catalog.*

College/School: Herberger Institute for Design and the Arts | Department/School: **School of Art**

Prefix: **ART** | Number: **394** | Title: Science and Art of Botanical Design | Units: 3

Course description: **Discover the multifaceted practice of botanical design as a science and an art form. In this course, you will exercise plant maintenance, study botanical nomenclature and postharvest care, and review theories of biophilic design, botanical wellness, ecopsychology, sociohorticulture, and ecotherapy. To learn the art behind the science, you will learn to create botanical arrangements using the design process in each lab session. We will explore topics including construction methodology, technique, and innovation as well as review the botanical design industry and its historical periods.**

Is this a cross-listed course? No | If yes, please identify course(s):

Is this a shared course? No | If so, list all academic units offering this course:

*Note- For courses that are crosslisted and/or shared, a letter of support from the chair/director of **each** department that offers the course is required for **each** designation requested. By submitting this letter of support, the chair/director agrees to ensure that all faculty teaching the course are aware of the General Studies designation(s) and will teach the course in a manner that meets the criteria for each approved designation.*

Is this a permanent-numbered course with topics? No

If yes, all topics under this permanent-numbered course must be taught in a manner that meets the criteria for the approved designation(s). It is the responsibility of the chair/director to ensure that all faculty teaching the course are aware of the General Studies designation(s) and adhere to the above guidelines. Chair/Director Initials _____ (Required)

Requested designation: Natural Sciences–SQ **Mandatory Review:** (Choose one)

*Note- a **separate** proposal is required for each designation.*

Eligibility: Permanent numbered courses **must** have completed the university's review and approval process. For the rules governing approval of omnibus courses, contact Phyllis.Lucie@asu.edu.

Submission deadlines dates are as follow:

For Fall 2018 Effective Date: October 1, 2017 For Spring 2019 Effective Date: March 10, 2018

Area(s) proposed course will serve:

A single course may be proposed for more than one core or awareness area. A course may satisfy a core area requirement and more than one awareness area requirements concurrently, but may not satisfy requirements in two core areas simultaneously, even if approved for those areas. With departmental consent, an approved General Studies course may be counted toward both the General Studies requirement and the major program of study.

Checklists for general studies designations:

Complete and attach the appropriate checklist

- Literacy and Critical Inquiry core courses (L)
- Mathematics core courses (MA)
- Computer/statistics/quantitative applications core courses (CS)
- Humanities, Arts and Design core courses (HU)
- Social-Behavioral Sciences core courses (SB)
- Natural Sciences core courses (SQ/SG)
- Cultural Diversity in the United States courses (C)
- Global Awareness courses (G)
- Historical Awareness courses (H)

A complete proposal should include:

- ☒ Signed course proposal cover form
- ☒ Criteria checklist for General Studies designation being requested
- ☒ Course catalog description
- ☒ Sample syllabus for the course
- ☒ Copy of table of contents from the textbook and list of required readings/books

It is respectfully requested that proposals are submitted electronically with all files compiled into one PDF.

Contact information:

Name: Dr. Morgan Anderson | E-mail: morgan@thefloriculture.com | Phone: 602-332-8532

Department Chair/Director approval: ***(Required)***

Chair/Director name (Typed): Joanna Grabski | Date: 09/13/2019

ARIZONA STATE UNIVERSITY

Chair/Director (Signature): 

Arizona State University Criteria Checklist for

NATURAL SCIENCES [SQ/SG]

Rationale and Objectives

Public scientific literacy, critical for sound decisions on scientifically infused issues such as climate change, includes understanding of basic science concepts, such as the fundamental behavior of matter and energy. It also includes the understanding that “science" is not an encyclopedic collection of facts. Rather, it is a process of exploration that embraces curiosity, inquiry, testing, and communication, to reduce uncertainty about nature. Absent understanding of scientific concepts and of the nature of science, science and pseudoscience are difficult to distinguish, and normal scientific disagreements may be misinterpreted as ideological or political disputes. The goal of the natural sciences (SQ/SG) requirement, including the laboratory requirement, is to instill understanding of basic science content and of the nature of science in every ASU graduate.

10/1989
REV: 1/1991, 3/1991, 1/2000, 10/2008, 4/2014

Proposer: Please complete the following sections and attach appropriate documentation.

ASU--[SQ] CRITERIA

I. - FOR ALL *QUANTITATIVE* [SQ] NATURAL SCIENCES CORE AREA COURSES, THE FOLLOWING ARE CRITICAL CRITERIA AND MUST BE MET:

YES	NO		Identify Documentation Submitted
☒	☐	**A.** Course emphasizes the mastery of basic scientific principles and concepts.	Assignment: Plant Maintenance Log Experiment: Syllabus and Rubric
☒	☐	**B.** Addresses knowledge of scientific method.	Assignment: Postharvest Care Experiment: Syllabus and Rubric
☒	☐	**C.** Includes coverage of the methods of scientific inquiry that characterize the particular discipline.	Quiz & Final Exam: Botanical Nomenclature and Identification
☒	☐	**D.** Addresses potential for uncertainty in scientific inquiry.	Assignment & Quiz: Reading Response and Quiz
☒	☐	**E.** Illustrates the usefulness of mathematics in scientific description and reasoning.	Assignment: Postharvest Care Experiment: Syllabus and Rubric. Assignment: Plant Maintenance Log Experiment: Syllabus and Rubric
☒	☐	**F.** Includes **weekly** laboratory and/or field sessions that provide hands-on exposure to scientific phenomena and methodology in the discipline, and enhance the learning of course material.	Lab Designs: Syllabus and Rubric
☒	☐	**G.** Students submit written reports of laboratory experiments for constructive evaluation by the instructor.	Assignment: Plant Maintenance Log Experiment: Syllabus and Rubric
☒	☐	**H.** Course is general or introductory in nature, ordinarily at lower-division level; not a course with great depth or specificity.	Assignment & Quiz: Reading Response and Quiz

II. - AT LEAST ONE OF THE FOLLOWING ADDITIONAL CRITERIA MUST BE MET WITHIN THE CONTEXT OF THE COURSE:			
☒	☐	**A.** Stresses understanding of the nature of basic scientific issues.	Assignment & Quiz: Reading Response and Quiz
☐	☐	**B.** Develops appreciation of the scope and reality of limitations in scientific capabilities.	
☐	☐	**C.** Discusses costs (time, human, financial) and risks of scientific inquiry.	

NOTE: CRITERIA FOR [SG] COURSES BEGIN ON PAGE 4.

III. - [SQ] COURSES MUST ALSO MEET THESE ADDITIONAL CRITERIA:			
YES	**NO**		**Identify Documentation Submitted**
☐	☐	**A.** Provides a substantial, quantitative introduction to fundamental principles governing behavior of matter and energy, in physical or biological systems.	
		B. Includes a college-level treatment of some of the following topics **(check all that apply below):**	
☐	☐	**a.** Atomic and molecular structure	
☐	☐	**b.** Electrical processes	
☐	☐	**c.** Chemical processes	
☐	☐	**d.** Elementary thermodynamics	
☐	☐	**e.** Electromagnetics	
☐	☐	**f.** Dynamics and mechanics	
[SQ] REQUIREMENTS CANNOT BE MET BY COURSES:			
• **Presenting a qualitative survey of a discipline.**			
• **Focusing on the impact of science on social, economic, or environmental issues.**			
• **Focusing on a specific or limiting but in-depth theme suitable for upper-division majors.**			

Proposer: Please complete the following section and attach appropriate documentation.

ASU--[SG] CRITERIA

I. - FOR ALL *GENERAL* [SG] NATURAL SCIENCES CORE AREA COURSES, THE FOLLOWING ARE CRITICAL CRITERIA AND MUST BE MET:

YES	NO		Identify Documentation Submitted
☐	☐	**1.** Course emphasizes the mastery of basic scientific principles and concepts.	
☐	☐	**2.** Addresses knowledge of scientific method.	
☐	☐	**3.** Includes coverage of the methods of scientific inquiry that characterize the particular discipline.	
☐	☐	**4.** Addresses potential for uncertainty in scientific inquiry.	
☐	☐	**5.** Illustrates the usefulness of mathematics in scientific description and reasoning.	
☐	☐	**6.** Includes **weekly** laboratory and/or field sessions that provide hands-on exposure to scientific phenomena and methodology in the discipline, and enhance the learning of course material.	
☐	☐	**7.** Students submit written reports of laboratory experiments for constructive evaluation by the instructor.	
☐	☐	**8.** Course is general or introductory in nature, ordinarily at lower-division level; not a course with great depth or specificity.	

II. - AT LEAST ONE OF THE ADDITIONAL CRITERIA THAT MUST BE MET WITHIN THE CONTEXT OF THE COURSE:

☐	☐	**A.** Stresses understanding of the nature of basic scientific issues.	
☐	☐	**B.** Develops appreciation of the scope and reality of limitations in scientific capabilities.	
☐	☐	**C.** Discusses costs (time, human, financial) and risks of scientific inquiry.	

[SG] REQUIREMENTS CANNOT BE MET BY COURSES:		
	• Presenting a qualitative survey of a discipline.	
	• Focusing on the impact of science on social, economic or environmental issues.	
	• Focusing on a specific or limiting but in-depth theme suitable for upper-division majors.	

Course Prefix	Number	Title	General Studies Designation
ART	394	Science and Art of Botanical Design	Natural Sciences SQ

Explain in detail which student activities correspond to the specific designation criteria. Please use the following organizer to explain how the criteria are being met.

Criteria (from checksheet)	How course meets spirit (contextualize specific examples in next column)	Please provide detailed evidence of how course meets criteria (i.e., where in syllabus)
SEE FOLLOWING PAGE		SEE FOLLOWING PAGE

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ART	394	Science and Art of Botanical Design	Natural Sciences SQ

Explain in detail which student activities correspond to the specific designation criteria. Please use the following organizer to explain how the criteria are being met.

Criteria (from checksheet)	How course meets spirit (contextualize specific examples in next column)	Please provide detailed evidence of how course meets criteria (i.e., where in syllabus)
I. A	The Plant Maintenance Log Experiment emphasizes the mastery of basic scientific principles by requiring students to practice autonomous behaviors through individually caring for a plant. Students collect weekly log data on their living species in order to interpret findings based on physical plant observations. Log data includes scientific observations including: botanical identification and nomenclature, date, time, temperature, light quality, watering frequency and measurement, and physical plant observations.	The description and requirements for students to complete the Plant Maintenance Log Experiment is provided in the course syllabus under the section Assignments & Deliverables, Plant Maintenance Log Experiment. The grading rubric for the Plant Maintenance Log Experiment additionally highlights the importance of scientific methods.
I. B	The Postharvest Care Experiment challenges students to develop an experiment using the scientific method with cut botanicals. Students are required to select a cut botanical of their choice, research the botanical's species' specific characteristics, and formulate a hypothesis on the postharvest longevity of the	The description and requirements for students to complete the Postharvest Care Experiment is provided in the course syllabus under the section Assignments & Deliverables, Postharvest Care Experiment. The grading rubric for the Postharvest Care Experiment additionally highlights the importance of the scientific method.

	species. Students will personally facilitate an experiment on the species and record data to formulate a conclusion and communicate results. Through the use of the scientific method, students will learn the importance of finding empirical evidence relating to supporting or contradicting their hypothesis.	
I. C	The Botanical Nomenclature Identification Quizzes and Final Exam are are integral scientific component of the course because this applied knowledge will increase their knowledge of the natural sciences (plant species) and further allow students to practice proper postharvest care for each particular plant species. Learning the latin, scientific name, common name, and design form of each cut botanical is required to inform the student of the importance of proper plant identification. Learning scientific names (genus and specific epithet) is imperative as these names allow the world to communicate unambiguously and without contradiction of plant species without misidentification. Furthermore, identification of plant species is required for ordering flowers from the wholesale or retail floristry industry to procure the appropriate materials for the construction of botanical arrangements. Furthermore, plant identification	The description and requirements for students to study the Botanical Nomenclature and Identification is provided in the course syllabus under the section Assignments & Deliverables, Botanical ID Quiz and Final Exam. The cumulative botanical id study document specifying the specifics of botanical nomenclature as well as a list of common names, latin names, and design forms with respective images is provided.

	methodology can be a helpful asset and practice to acquire in one's lifetime for personal recreation or enrichment and for a career in agriculture. Learning about plants reduces plant blindness, thus increasing awareness of the natural world and builds an appreciation for nature and botanicals.	
I. D	Students are exposed to a variety of scientific, theory based research within their required readings relating to biophilia, ecotherapy, ecopsychology, and horticulture therapy. These theories are presented to assist students in answering the questions "why are we drawn to elements of botanicals/nature?," "why do we need botanicals/nature in our lives?," or "how are/is botanicals/nature a benefit to us?." These concepts are theories with a level of uncertainty to why we desire or require botanicals/nature in our lives for personal wellness. We may never definitively know the answer to these questions, but these theories provide a framework to consider.	The description and requirements for students to review both the Reading Response and Quiz are provided in the course syllabus under the section Assignments & Deliverables, Reading Response and Quiz. The grading rubric for the Reading Response identifies the comprehension of the subject's material. No rubric is available for the Quiz. The Reading Response allows students to express opinions to the theories presented while the Quiz accesses students' understanding of the theories.
I. E	Both the Plant Maintenance Log Experiment and the Postharvest Care Experiment require scientific, mathematical data collection. For the Postharvest Care Experiment, students are required to log numerical data	The descriptions and requirements for students to review the Plant Maintenance Log Experiment and the Postharvest Care Experiment are provided in the course syllabus under the section Assignments & Deliverables, Plant Maintenance Experiment and Postharvest Care

	including time of day and room temperature and relate the interdependence of these observations to the current senescence stage of the cut botanical. For the Plant Maintenance Log, students are required to record numerical data including the date and time of day to synthesize, compare, and adjust data measurables including watering frequency and measurement as well as room temperature. For this experiment, students are required to record the quantity of water (oz) given to each plant and adjust the watering frequency and measured amount based on physical plant observations. Additionally for the Plant Maintenance Log, students are required to record the weekly temperature (degrees Fahrenheit) of the plant location and adjust based on physical plant observations.	Experiment. The grading rubric for both the Plant Maintenance Log Experiment and the Postharvest Care Experiment identify the scientific data collection requirements relating to mathematics.
I. F	In each weekly lab session, students will design a botanical arrangement demonstrated by the instructor using botanicals covered in the botanical identification and nomenclature testing. Students will be hands-on with each species to create the arrangement while practicing their postharvest care procedures and the design process.	The description and requirements for students to review Lab Designs is provided in the course syllabus under the section Assignments & Deliverables, Lab Designs. The grading rubric for the Lab Designs identifies the areas of synthesis in related topics such as postharvest care and botanical identification and nomenclature.
I. G	Each week, students are required to complete their	The description and requirements for students to review the Plant

	Plant Maintenance Log as an at-home, laboratory experiment. The instructor will review each weekly Log to confirm accurate log details and answer questions to assist in the student's plant maintenance. This particular project requires students to practice autonomous behaviors in performing weekly plant maintenance as a form of an experiment, log weekly plant details, and make observations or ask questions to assist in the care of their plant species.	Maintenance Log Experiment is provided in the course syllabus under the section Assignments & Deliverables, Plant Maintenance Log Experiment. The grading rubric for the Plant Maintenance Log Experiment identifies the fundamental components of completing scientific methods in the form of data recording, plant observations, and drawing scientifically based conclusions.
I. H	The Science and Art of Botanical Design course is introductory in nature as it covers the basic theories that support both the artistic and scientific topics of the field. Students receive an overview of reading subjects related to art including its history as an art form, the design process and elements and principles, as well as a review of the cut botanical wholesale industry. In relation to scientific subjects, students review postharvest care, botanical nomenclature, plant maintenance, and theories related to biophilia, horticulture therapy, ecotherapy, and ecopsychology. All mentioned subjects are equally weighted on content and grade-scale. Each week, students are required to read excerpts related to each subject with a reading response and quiz	The description and requirements for students to review both the Reading Response and Quiz are provided in the course syllabus under the section Assignments & Deliverables, Reading Response and Quiz. The grading rubric for the Reading Response identifies the comprehension of the subject's material. No rubric is available for the Quiz. A final exam on the reading material is not given due to the vast array of topics relating to botanical design covered in the coursework. Because the course is introductory in nature, students will focus on studying one topic, the botanical nomenclature, for their final exam.

	following to access the students' comprehension and synthesis of the material.	
II. A	The Science and Art of Botanical Design course stresses the understanding of the nature of basic scientific issues within each topical, scientific component of the course material. Therefore, a synopsis of scientific reading material include: postharvest care, botanical nomenclature, plant maintenance, and theories related to biophilia, ecotherapy, horticulture therapy, and ecopsychology. These topics stress the importance of the natural world, how botanicals impact our physical and mental health, as well as how humankind can understand and care for nature and botanicals.	The description and requirements for students to review both the Reading Response and Quiz are provided in the course syllabus under the section Assignments & Deliverables, Reading Response and Quiz. The grading rubric for the Reading Response identifies the comprehension of the subject's material. No rubric is available for the Quiz.

Science and Art of Botanical Design: Art 394
3 Unit Course

Course Description:
Discover the multifaceted practice of botanical design as a science and an art form. In this course, you will exercise plant maintenance, study botanical nomenclature and postharvest care, and review theories of biophilic design, botanical wellness, ecopsychology, sociohorticulture, and ecotherapy. To learn the art behind the science, you will learn to create botanical arrangements using the design process in each lab session. We will explore topics including construction methodology, technique, and innovation as well as review the botanical design industry and its historical periods.

Higher Education Institution & Course Description	**Arizona State University** **Science and Art of Botanical Design | ART 394 | Course # TBD** **School of Art | Herberger Institute for Design and the Arts** Non-Major Art Course, Special Topics Elective Offering Course Structure: Hybrid Online (Canvas) + Lab ● Dates: TBD ● Lab Meeting Time: TBD ● Campus Holidays: TBD ● Class Location: School of Art Building, ART 332
Instructor	Dr. Morgan Anderson | morgan@thefloriculture.com | www.thefloriculture.com | Preferred Method of Instructor Contact: (email) morgan@thefloriculture.com | (cell) 602.332.8532 | Dr. Morgan Anderson holds both a masters (Kansas State Univeristy) and a Ph.D. (Texas A&M University) in the plant science discipline of horticulture. Her master's degree research on postharvest care has been published in the peer reviewed academic journal HortTechnology. Currently, her Ph.D. research on the interdisciplinary nature of botanical design, as both a science and an art, is in-press.
Course Catalog Description	Discover the multifaceted practice of botanical design as a science and an art form. In this course, you will exercise plant maintenance, study botanical nomenclature and postharvest care, and review theories of biophilic design, botanical wellness, ecopsychology, sociohorticulture, and ecotherapy. To learn the art behind the science, you will learn to create botanical arrangements using the design process in each lab session. We will explore topics including construction methodology, technique, and innovation as well as review the botanical design industry and its historical periods.
Book Recommendations	NOTE: Many of the course readings will be provided from these key texts listed below but are *not required to purchase* for the course (reading photocopies from texts and journals will provided on course's Canvas website): **Theory Based Botanical & Art Wellness** ● Hoticultural Therapy Methods: Connecting People and Plants in Health Care: R. Haller, C. Capra ● Nature By Design: The Practice of Biophilic Design: S. Kellert ● The Biophilic Effect: A Science and Spiritual Exploration of the Healing Bond Between Humans and Nature: C. Arvay ● Ecopsychology: Theodore Roszak, Mary Gomes, Allen Kanner ● The Nature Fix: Why Nature Makes Us Happier, Healthier, and More Creative: Florence Williams ● The Voice of the Earth: Theodore Roszak ● Forest Bating: How Trees Can Help You Find Health and Happiness: Q. Li ● The Soul's Palette: Drawing on Art's Transformative Powers for Health and Well-Being: Cathy Malchiodi ● The Artist's Way: A Spiritual Path to Higher Creativity: Julia Cameron ● The Art Therapy Sourcebook: Cathy Malchiodi ● Art Therapy Techniques and Applications: Susan Buchalter **Botanical Design, Postharvest Care, & Plant Maintenance** ● Indoor Green: Living with Plants: B. Claffey ● Flower Evolution: Katie Hess ● Flower Confidential: Amy Stewart ● Flowers: Creative Design: James Johnson Jr., William J. McKinley Jr., M. Benz ● Floral Design and Arrangement: Gary L. McDaniel ● Floristry and Flower Arranging: Joy Fleming

	• Pictorial Guide to House Plants: M. Jane Coleman Helmer, Ph.D. • The Art of Floral Design: Norah T. Hunter • The Art of Flower Arrangement: Norman De Kalb Edwards

Learning Outcomes
Foundational Knowledge a. Understanding the interconnectedness of science and art in botanical design. b. Knowing botanical nomenclature and plant maintenance. c. Relating wellness therapies of horticulture and art to personal practice. d. Knowing the fundamental construction methodologies and techniques to produce a botanical arrangement.
Application of Course Material a. Practice botanical nomenclature and plant maintenance while creating a botanical arrangement. b. Produce artworks that reflect the use of nature either visually or manually. c. Discover nature as a muse and/or medium.
Integration of Course Material a. Linking the scientific and artistic components of botanical design. b. Synthesizing the interconnectedness of online lecture content to lab sessions. c. Connecting course content to personal experiences, knowledge, and practice.
Human Dimension a. Experiment with theories of ecotherapy and ecopsychology. b. Appreciate fellow artisans and biophilic design. c. Generate knowledge of plants to reduce plant blindness.
Learning How to Learn a. Developing autonomous behaviors through self-directed coursework design. b. Using newly obtained knowledge and skill sets to apply towards other studies.

Course Expectations	
Student's Role	Instructor's Role
1. Prepare and participate in all online lecture (Canvas) and lab sessions. 2. Practice autonomous behaviors in regard to course material, assignments, evaluations, and asking for instructor assistance. 3. Keep open communication between fellow students and the instructor. 4. Proficient use of Canvas to complete online lecture content. Contact ASU Technical Support (holsupport@asu.edu) if needed.	1. Prepare and engage students in all online lecture (Canvas) and lab sessions. 2. Assist students in developing autonomous behaviors and answer student questions about course material, assignments, and evaluations. 3. Provide timely feedback and educational opportunities to engage communication between students and the instructor. 4. Proficient use of Canvas to complete online lecture content.
Netiquette: A social code that defines "good" online behavior is something to keep in mind during online course interactions. Follow the guidelines below to leave your mark as a knowledgeable, respectful and polite student who is also positioned to succeed professionally. **Be Scholarly** **Do:** Use proper language, grammar and spelling. Be explanatory and justify your opinions. Credit the ideas of others through citing and linking to scholarly resources. **Avoid:** Misinforming others when you may not know the answer. If you are guessing about something, clearly state that you do not know the answer. **Be Respectful**	

Do: Respect privacy, diversity and opinions of others. Communicate tactfully and base disagreements on scholarly ideas or research evidence.
Avoid: Sharing another person's professional or personal information.

Be Professional
Do: Represent yourself well at all times. Be truthful, accurate and run a final spell check. Limit the use of slang and emoticons.
Avoid: Using profanity or participating in hostile interactions.

Be Polite
Do: Address others by name or appropriate title and be mindful of your tone. Treat people as if you were in a face-to-face situation.
Avoid: Using sarcasm, being rude or writing in all capital letters. Written words can be easily misinterpreted as they lack nonverbals.

Attendance Policy

It is required that students complete all online lecture (Canvas) content and attend weekly lab sessions. This attendance requirement is due to the nature of the course design; students are encouraged to communicate and work together to develop knowledge, link information, and develop hermeneutic inquiry. Furthermore, student attendance assists the instructor in assessing comprehension and synthesis of the knowledge taught between online lecture (Canvas) and lab.

If circumstances arise and a student will be absent for a lab session, please inform the instructor as soon as possible. ***There will be no makeup lab sessions, even with excused absences.*** Because cut flowers and greens are perishable, the instructor cannot guarantee the botanicals will be available.

In order to ensure students are fully participating in the coursework, a maximum of 3 excused absences per student is enforced. In the event of receiving an unexcused absence or 4 (or more) excused absences, be aware that Lab Design Points will be lowered accordingly.

For students with an excused absence, two documents are due one week after the missed lab session.

1. Submit a credible, signed document (ex. a doctor's note)
2. Submit a double spaced, one page response paper to a course topic of choice with two references in APA format.

Online Lecture (Canvas) & Lab Course Schedule

Unit	Dates	Content
Canvas Unit 1	TBD	• Botanical Nomenclature and Identification • Botanical Art & Innovation
Lab 1	TBD	• Lab Introduction, Syllabus
Canvas Unit 2	TBD	• Plant Maintenance • Botanical Art Tools
Lab 2	TBD	• Mandala

Canvas Unit 3	TBD	• Postharvest Care • Botanical Design Industry
Lab 3	TBD	• Potted, Interiorscaping Plant
Canvas Unit 4	TBD	• Plant Blindness • Design Process
Lab 4	TBD	• Budvase Arrangement
Canvas Unit 5	TBD	• Biophilic Desgin • Principles & Elements
Lab 5	TBD	• Glass Vase Design
Canvas Unit 6	TBD	• Methodology Systems for Construction
Lab 6	TBD	• Terrarium
Canvas Unit 7	TBD	• Methodology Techniques
Lab 7	TBD	• Curved Form Design (Circle or Fan)
Canvas Unit 8	TBD	• Botanicals as a Medium & Muse • Application of Botanical Design
Lab 8	TBD	• Linear Form Design (“L” Shape, Triangle, Rectangle)
Canvas Unit 9	TBD	• Botanical History
Lab 9	TBD	• Lei
Canvas Unit 10	TBD	• Slow Flowers (locally grown botanicals)
Lab 10	TBD	• Arizona Grown Design

Canvas Unit 11	TBD	• Horticulture & ArtTherapies/Wellness • Sociohorticulture
Lab 11	TBD	• Wearable Flowers
Canvas Unit 12	TBD	• Ecotherapy & Ecopsychology
Lab 12	TBD	• Hand-tied Bouquet
Canvas Unit 13	TBD	• Health in Nature: Shinrin Yoku
Lab 13	TBD	• Abstract Design
Canvas Unit 14	TBD	• Content Review
Lab 14	TBD	• Botanical ID Final

Assignments & Deliverables		
Reading Response (Canvas)	**Submit a single page, 300 - 500 word response paper each week on Canvas to the required readings, videos, and online lecture provided for that week.** Integrate concepts reviewed in online lecture (Canvas) and lab, express opinions, and/or examine how the reading may benefit you in your practice of producing botanical art and for personal botanical wellness. No references required. Due each week, 13 responses total	130 Points (10 points per submission)
Online Lecture Quiz (Canvas)	**Each week an online lecture (Canvas) quiz will assess reading comprehension of the unit's material and synthesis of lab work.** Quizzes are timed and are available on Canvas each week. Due each week, 13 quizzes total	130 Points (10 points per quiz)
Plant Maintenance Log Experiment (Canvas)	**In the second lab meeting, you will be provided a interiorscape plant to maintain and keep. Keep a weekly log record of your plant maintenance details and photograph your plant's weekly growth.** Submit your weekly detailed log and corresponding photograph in a single document on Canvas.	130 Points (10 points per log+picture or drawing)

	Log Details: ● Species Latin Name ● Maintenance Date ● Maintenance Time ● Location Temperature ○ (Degrees Fahrenheit) ● Location Light ○ (Dark, Indirect, Direct) ● Watering Frequency & Measurement ○ [Fluid Ounces (oz)] ● Physical Plant Observations Submission Note: The Physical Plant Observations may be brief, but should showcase synthesis between physical plant properties. For example: The plant's leaves appear to be brown and spotted. These brown spots may have developed when I moved my plant closer to the window near direct light. Grading rubric available for review on Canvas. Log is recorded on Canvas each week, 13 logs total	
Postharvest Experiment (Canvas)	**Using the scientific method, experiment and compare the postharvest longevity of one cut botanical to another cut botanical from the botanical ID list.** Follow the scientific method's procedure below to complete this assignment. 1. **Ask Question:** Which cut botanical will have a greater longevity? 2. **Background Research:** In one paragraph per selected cut botanical, research the postharvest care of each species. 3. **Construct a Hypothesis:** Based on your research, determine which botanical will have greater longevity. 4. **Test with an Experiment:** Take photos every 24 hours of the cut botanical and discern log details with recorded data. a. Date and Time of Day b. Plant Characteristics: Height, Color, Turgidity c. Temperature in Room d. Light in Room e. Plant Fitness: Blooming or Senescence Details f. Record Date of Death/Decay 5. **Analyze Data and Draw Conclusions:** Review compiled data and determine which botanical 6. **Communicate Results:** In three paragraphs, report your findings. Compare and contrast the postharvest care and longevity of the botanicals. Acknowledge variances and/or similarities in found research to your experiment. Determine how this exercise is important and related to creating botanical art. A total of six references required (three references per botanical). Submit on Canvas. Grading rubric available for review on Canvas. Due Date TBD	50 Points

Botanical ID Quiz (Canvas)	**Each week an online (Canvas), cumulative botanical id/nomenclature quiz will assess identification of plant species and latin plant names.** Quizzes are timed and are available on Canvas each week. Botanical lists available on Canvas. Common and Latin names required with correct spelling for full points. Due each week, 13 quizzes total	130 Points (10 points per quiz)
Lab Designs	**Students are required to attend all lab sessions. A new botanical arrangement construction methodology or technique will be designed each week (refer to schedule). Students will meet with the instructor after their design is complete for evaluation and critical discussion. Assessment will be co-reviewed with the student and instructor at the end of class (attendance will be taken at this time).** Students will take home each arrangement they personally create. Students are required to co-review their completed arrangement with the instructor before leaving the lab. The co-review content covered: ● Completed Design Demonstrates Methodology of Construction in Techniques and Steps ● Synthesis of Course Content: Related Postharvest Care, Botanical Nomenclature and Identification, and Design Process to the arrangement ● Identified a “Personal Well Done” through Innovation and Identified Personal Meaning with the Design ● Identify a “Personal Opportunity for Improvement” and work with the instructor to find a solution to remedy when designing in the future ● Completion of the Design Process Grading rubric available for review on Canvas. Due each week, 13 labs total	195 Points (15 points per lab session)
Research Excursion: Art in Nature Project & Response Paper (Canvas)	**As a research excursion in reducing plant blindness, create a piece of art in nature. Select any medium for your artistic creation.** **Take a photo of the natural setting in which you created your piece of art.** **Take a photo of your completed artwork in this nature setting.** Write a two page response (double spaced) about this experience and how it relates to horticulture and artistic wellness, plant blindness, and biophilia. No references required. Submit on Canvas. Grading rubric available for review on Canvas. Due Date TBD	40 Points

Professional Florist Research Project (Canvas)	**Research and list 5 botanical artists or botanical design companies that you believe create works of botanical art.** Provide the following information and opinions about each designer/artist/company that you find for this assignment. ● Name (artist/company) ● Website ● Studio Location(s) ● Write a paragraph identifying botanicals used within their arrangements and analyze how their arrangements may be considered art. ● Take a screenshot of two of your selected artist's arrangements that you consider works of art. Submit your organized list with images in a single document on Canvas. Grading rubric available for review on Canvas. Due Date TBD	40 Points
Forage Project (Canvas)	**Create a cut botanical arrangement with foraged ingredients (permission slip required to be signed by gardener and/or gardening authority).** **Take a photo of your completed arrangement and submit online.** **Attach the signed permission slip along with your image to Canvas.** No written submission or references required. Submit on Canvas. Grading rubric available for review on Canvas. Due Date TBD	30 Points
Botanical ID Final (Canvas)	Final Exam of Botanical ID available on Canvas.	125 Points
	Total Course Points	**1000 Points**

Total Points for Class (Lecture & Lab)	**1000 Points**
Letter A Grade 100% - 90%	**1000 - 900 Total Points**
Letter B Grade 89.9% - 80%	**900 - 800 Total Points**
Letter C Grade 79.9% - 70%	**800 - 700 Total Points**
Letter D Grade	**700 - 600 Total Points**

69.9% - 60%	
Letter F Grade 59.9% and less	**600 - 0 Total Points**

Assessment of Deliverables

The instructor expects students to be prepared for both online lecture (Canvas) and lab as well as punctually submit assignments. The instructor's ability to efficiently evaluate students' academic work is based on the students' commitment to the coursework requirements, material, and assignments. Student grades are based on effort, practice, demonstration, and application of knowledge of the content needed to accomplish the assigned deliverables. Students must show a higher level of learning and synthesis of knowledge to interconnect the online lecture content and the lab designs. Grades are awarded based on students' ability to develop a keener understanding of the practice of botanical design as an science and art.

Arizona State University
Student Code of Conduct

The aim of education is the intellectual, personal, social, and ethical development of the individual. The educational process is ideally conducted in an environment that encourages reasoned discourse, intellectual honesty, openness to constructive change, and respect for the rights of all individuals. Self -discipline and a respect for the rights of others in the university community are necessary for the fulfillment of such goals. The Student Code of Conduct is designed to promote this environment at Arizona State University.

The Student Code of Conduct sets forth the standards of conduct expected of students who choose to join the university community. Students who violate these standards will be subject to disciplinary sanctions in order to promote their own personal development, to protect the university community, and to maintain order and stability on campus.

All Students are expected to adhere to the ABOR Student Code of Conduct.

Student Services and Resources

You will find a list of student resources at: https://tutoring.asu.edu/student-resources
Resources included are advisement, registration, financial aid, disability services, counseling, tutoring, library, and more.

Special Accommodations

Students with disabilities must have an equally effective and equivalent educational opportunity as those students without disabilities. Students experiencing difficulty accessing course materials because of a disability are expected to contact the course instructor so that a solution can be found that provides all students equal access to course materials and technology.

Your instructor is willing to make any reasonable adaptations for limitations due to any documented disability, including learning disabilities. Please contact the instructor during office hours or by appointment to discuss any special needs you may have.

You must contact the Disability Resource Center to process the paperwork for special course accommodations. To request academic accommodations due to a disability, please contact the ASU Disability Resource Center (http://www.asu.edu/studentaffairs/ed/drc/# ; Phone: (480) 965-1234; TDD: (480) 965-9000). This is a very important step as accommodations may be difficult to make retroactively. If you have a letter from their office indicating that you have a disability which requires academic accommodations, in order to assure that you receive your accommodations in a timely

manner, please present this documentation to me no later than the end of the first week of the semester so that your needs can be addressed effectively.

If you have a documented disability, including a learning disability, and would like to discuss possible accommodations, please contact the ASU Disabilities Resources and Services Office at 480-965-1234 or email DRC@asu.edu https://eoss.asu.edu/drc. On then Tempe Campus: Matthews Center building, 1st floor.

Academic Calendar and Important Dates

The academic calendar can be found here: https://students.asu.edu/academic-calendar.

The Writing Center

Students have access to Academic Support Programs including tutoring and the writing center. Information on these resources can be found here, https://tutoring.asu.edu/.

Counseling & Consultation

Students have access to Counseling & Consultation services. Information on this can be found here, https://eoss.asu.edu/counseling.

Health and Wellness

Students have access to Health and Wellness services. Information on this can be found here, https://eoss.asu.edu/health, https://wellness.asu.edu/.

Technical Requirements & Support

- You will need a standard laptop or desktop computer to access your classes. A mobile device, tablet or netbook will not provide the access and functionality necessary for ASU Online courses. A webcam and headset (with microphone) may be required for some classes.
- High-speed internet is needed as most ASU Online courses use multimedia tools that are best viewed with high-speed internet, so having the proper connection is essential.
- You should have at least two browsers on your computer. Any browser will work, though preferred browsers are Chrome and Firefox, which can be downloaded for free online.
- In general, course access and assignments do not require special software, however, certain degrees may require specific software programs (your instructors will notify you if this is the case).
- ASU students have access to Google Drive (My Drive via MyASU), where you can create and share Google documents, presentations, spreadsheets and more. You will also have access to additional software provided at no cost through My Apps at MyASU.
- Be sure to take time to explore MyASU. This will be critical to your success as a student.

Please do not contact your instructor with technical questions. Herberger Online handles all technical questions and issues that may arise in this course.

Please contact the support team immediately if you encounter technical issues while completing an assignment and you are unable to resolve the problem and reset your work.

The Herberger Online support team is available to assist you 24 hours a day, 365 days a year. You may reach them anytime at:

- holsupport@asu.edu
- 1-888-298-4117
- 480-965-3057 (International)

When contacting support, please provide:

- The full name of this course (ABC 123: Long Name)
- The title(s) of any assignment(s) you're having trouble with
- A brief description of the problem
- Detailed, step-by-step instructions to reproduce the problem

Course Drop or Withdrawal

If you are unable to complete the course, it is your responsibility to arrange for withdrawal from the class. You will not be automatically withdrawn and unless you are officially withdrawn from the course you will receive a final grade based upon the total points you have earned for the semester. Students are required to pay all tuition and fees for any registered course unless enrollment is officially cancelled during the 100% refund period. Please visit the Academic Calendar to review the withdrawal deadlines for this semester. For more information on Drop/Add and Withdrawal visit: https://students.asu.edu/drop-add

Consistent with ASU policy, withdrawals will be handled as per the following guidelines: Withdrawal before the end of the fourth week: A "W" will be recorded Withdrawal after the end of the fourth week: A "W" will be recorded if you have a passing grade at the time of withdrawal. An "E" will be recorded if you have a failing grade at the time of withdrawal.

Botanical ID List & Nomenclature Characteristics

Art & Science of Floral Design Course
Fall 2020 Semester

Botanical Nomenclature Characterisics:
Each botanical has a common name and scientific name.
Scientific names must be written in botanical Latin.

1. There are always two words in botanical latin.
    a. The first word is the *genus* name.
    b. The second word is the *specific epithet*.
2. Botanical latin names require certain capitalization.
    a. The genus name's first letter is always capitalized.
    b. The specific epithet's first letter is never capitalized,
3. Botanical latin requires names to be underlined or italicized.
    a. But there are exceptions to the rule for certain botanical's specific epithet.
        i. If the specific epithet is "spp." do not underline or italicize.
            1. spp. is short for the word species, a general term applied when the specific epithet has a variety of names for certain botanicals.

Example of the (common name) Hydrangea's scientific name:
Genus: *Hydrangea*
Specific Epithet: *macrophylla*
Hydrangea macrophylla **or** Hydrangea macrophylla

Example of the (common name) Rose's scientific name:
Genus: *Rosa*
Specific Epithet: spp.
Rosa spp. **or** Rosa spp.

Botanical Design Form Characteristics:
There are four designated design form characteristics: form, mass, line, and filler.

Form: a botanical species with a unique, uncommon botanical shape
Mass: a botanical speices filling an abundance of positive space
Line: a botanical species set in a hortizontal, vertical, or diagonal line
Filler: a botanical species filling a relatively small space

Additional Botanical Images & More Information:
Mayesh Flower Library [https://www.mayesh.com/flower-library/]

Botanical ID List 1

Common Name	Scientific Name	Design Form	Image
Rose	*Rosa* spp. Or Rosa spp.	Mass	
Olive	*Olea europaea* Or Olea europaea	Line, Filler	
Spray Rose	*Rosa* spp. Or Rosa spp.	Mass, Filler	

Botanical ID List 2

Common Name	Scientific Name	Design Form	Image
Eucalyptus	*Eucalyptus* spp. Or Eucalyptus spp.	Mass, Line, Filler	
Anemone	*Anemone coronaria* Or Anemone coronaria	Mass	
Gerbera Daisy	*Gerbera jamesonii* Or Gerbera jamesonii	Mass	

Botanical ID List 3

Common Name	Scientific Name	Design Form	Image
Ranunculus	*Ranunculus asiaticus* Or Ranunculus asiaticus	Mass	
Air Plant	*Tillandsia xerographica* Or Tillandsia xerographica	Mass	
Hydrangea	*Hydrangea macrophylla* Or Hydrangea macrophylla	Mass, Filler	

Botanical ID List 4

Common Name	Scientific Name	Design Form	Image
Peony	*Paeonia* spp. Or Paeonia spp.	Mass	
Alstroemeria	*Alstroemeria aurantiaca* Or Alstroemeria aurantiaca	Filler	
Myrtle	*Myrtus* spp. Or Myrtus spp.	Line	

Botanical ID List 5

Common Name	Scientific Name	Design Form	Image
Lemonleaf	*Gaultheria shallon* Or Gaultheria shallon	Mass	
Sunflower	*Helianthus annuus* Or Helianthus annuus	Mass	
Pine	*Pinus* spp. Or Pinus spp.	Mass, Filler	

Botanical ID List 6

Common Name	Scientific Name	Design Form	Image
Gardenia Flower	*Gardenia jasminoides* Or Gardenia jasminoides	Mass	
Gardenia Foliage	*Gardenia jasminoides* Or Gardenia jasminoides	Mass, Filler	
Hypericum Berry	*Hypericum androsaemum* Or Hypericum androsaemum	Filler	

Botanical ID List 7

Common Name	Scientific Name	Design Form	Image
Phalaenopsis Orchid	*Phalaenopsis amabilis* Or Phalaenopsis amabilis	Form	
Cymbidium Orchid	*Cymbidium* spp. Or Cymbidium spp.	Form	
Helleborus	*Helleborus orientalis* Or Helleborus orientalis	Form, Mass, Filler	

Botanical ID List 8

Common Name	Scientific Name	Design Form	Image
Hyacinth	*Hyacinthus orientalis* Or Hyacinthus orientalis	Form	
Tulip	*Tulipa* spp. Or Tulipa spp.	Form	
Waxflower	*Chamelaucium uncinatum* Or Chamelaucium uncinatum	Filler	

Botanical ID List 9

Common Name	Scientific Name	Design Form	Image
Baby's Breath	*Gypsophila elegans* Or Gypsophila elegans	Filler	
Daffodil	*Narcissus pseudonarcissus* Or Narcissus pseudonarcissus	Form	
Plumosa Fern	*Asparagus setaceus* Or Asparagus setaceus	Filler	

Botanical ID List 10

Common Name	Scientific Name	Design Form	Image
Stock	*Matthiola incana* Or Matthiola incana	Line, Mass	
Succulent	*Echeveria* spp. Or Echeveria spp.	Mass, Form	
Allium	*Allium* spp. Or Allium spp.	Mass, Form	

Botanical ID List 11

Common Name	Scientific Name	Design Form	Image
Dahlia	*Dahlia pinnata* Or Dahlia pinnata	Mass	
Calla Lily	*Zantedeschia aethiopica* Or Zantedeschia aethiopica	Form	
Dusty Miller	*Jacobaea maritima* Or Jacobaea maritima	Mass, Filler	

Science and Art of Botanical Design: Fall 2020 Semester

Plant Maintenance Weekly Log Experiment: 13 Logs Due, each log is graded separately for 10 points (total 130 points)

Criteria		Unacceptable	Developing	Proficient	Accomplished
Log Detail Completeness 3 points		Three or less log details are provided from the required list: ● Species Latin Name ● Maintenance Date ● Maintenance Time ● Location Temperature ● Location Light ● Watering Frequency & Measurement ● Physical Plant Observations	Four to five log details are provided from the required list: ● Species Latin Name ● Maintenance Date ● Maintenance Time ● Location Temperature ● Location Light ● Watering Frequency & Measurement ● Physical Plant Observations	Five to six log details are provided from the required list: ● Species Latin Name ● Maintenance Date ● Maintenance Time ● Location Temperature ● Location Light ● Watering Frequency & Measurement ● Physical Plant Observations	All seven log details are provided, including: ● Species Latin Name ● Maintenance Date ● Maintenance Time ● Location Temperature ● Location Light ● Watering Frequency & Measurement ● Physical Plant Observations
Image Content 2 points		No image provided of the plant.	Plant image is provided but does not reflect the log details (physical observation/light)	Plant image is provided and reflects the log details (physical observation/light).	Plant image is provided and closely reflects the log details (physical observation/light).
Physical Plant Observations Content 3 points		Does not provide a detailed physical plant observation or the observation deems to be inaccurate based on complementary log details.	Provides a simplistic physical observation of the plant. Recognition of the interconnected physical plant properties are not provided.	Accurately expresses the physical observations of the plant. Some recognition of the interconnected physical plant properties are provided.	Demonstrates synthesis of the log details to interpret the current condition of the plant. Observations highlight the intersection of the plant's physical properties.
Clarity & Grammar 2 points		Organization and proper metrics show minimal comprehension of scientific methods.	Organization and proper metrics show basic comprehension of scientific methods.	Organization and proper metrics show comprehension of scientific methods.	Organization and proper metrics show clear comprehension of scientific methods.

Science and Art of Botanical Design: Fall 2020 Semester

Postharvest Care Experiment: 50 total points

Criteria	Unacceptable	Developing	Proficient	Accomplished
Question, Research, & Hypothesis 15 points	Student's failure to develop the initial methods of procedure of the scientific method. The postharvest question, botanical research, and hypothesis are not developed.	Student's work vaguely develops the initial methods of procedure of the scientific method. The postharvest question, botanical research, and hypothesis are either missing detail or a step in the scientific method is incomplete.	Student's work develops the initial methods of procedure of the scientific method. The postharvest question, botanical research, and hypothesis are presented in detail.	Student's work fully develops the initial methods of procedure of the scientific method by providing context and detail. The postharvest question, botanical research, and hypothesis are well established for the student to begin the experiment.
Experiment & Procedure 15 points	Student's failure to facilitate the postharvest experiment, steps of the procedure, and/or recording of data.	Student's work to facilitate the postharvest experiment and steps of the procedure are missing log details and data.	Student adequately facilitates the postharvest experiment by following the steps of procedure and recording data.	Student exceptionally facilitates the postharvest experiment by following the steps of procedure and recording data with details to assist formulation of analysis and conclusion.
Analysis & Conclusion 10 points	Student's failure to form of an analysis of the experiment's data and draw conclusions. (Analysis requires forming a summary of the data and observations.)	Student's analysis of the experiment's data is not comprehensive and lacks detail in summary and observation.	Student's analysis of the experiment's data is comprehensive and provides a summary and observations.	Student's analysis of the experiment's data is well developed and comprehensive, providing a detailed summary and pertinent observations.
Communication of Results 10 points	Student's failure to communicate acquired knowledge and synthesis of the experiment's data with found research. Student did not state rejection or acceptance of formed hypothesis.	Student vaguely communicates acquired knowledge and synthesis of the experiment's data with found research. Student briefly mentions rejection or acceptance of formed hypothesis.	Student communicates acquired knowledge and synthesis of the experiment's data with found research. Student states rejection or acceptance of formed hypothesis.	Student exceptionally communicates acquired knowledge and synthesis of the experiment's data with found research. Student states rejection or acceptance of formed hypothesis.

Science and Art of Botanical Design: Fall 2020 Semester

Reading Response: 13 Responses Due, each response is graded separately for 10 points (total 130 points)

Criteria		Unacceptable	Developing	Proficient	Accomplished
Comprehension 4 points		Student's response indicates a lack of understanding of the reading's subject matter and details.	Student's response vaguely showcases understanding of the reading's subject matter and relevant details.	Student's response indicates understanding of the reading's subject matter and relevant details.	Student's response indicates clear comprehension and understanding of the reading's subject matter and relevant details.
Critical Thinking 4 points		Student's response does not acknowledge concepts taught in online lecture and lab relating to current reading material.	Student's response mentions concepts taught in online lecture and lab relating to current reading material.	Student's response acknowledges concepts taught in online lecture and lab relating to current reading material.	Student's response showcases synthesis and integration of concepts taught in online lecture and lab relating to current reading material.
Academic Writing Organization, Word Choice, Grammar, Voice 2 points		Student's response is not well developed in organization, word choice, grammar, and voice.	Student's response is developing in organization, word choice, grammar, and voice.	Student's response contains proper organization, word choice, grammar, and voice.	Student's response is well developed in organization, word choice, grammar, and voice.

Science and Art of Botanical Design: Fall 2020 Semester

Lab Design & Design Co-Evaluation with Instructor : 15 Designs Due, each design is graded separately for 15 points (total 195 points)

Criteria		Unacceptable	Developing	Proficient	Accomplished
Design Completeness 5 points		Student did not complete the demonstrated techniques and steps to create the botanical arrangement, design assignment.	Student did not fully complete the demonstrated techniques and steps to create the botanical arrangement, design assignment.	Student fulfilled the majority of the demonstrated techniques and steps to create the botanical arrangement, design assignment.	Student followed the demonstrated techniques and steps to create the botanical arrangement, design assignment.
Critical Thinking Synthesis of Course Content 3 points		Student does not review relevant content of postharvest care, botanical nomenclature and identification, or design process to acknowledge synthesis of course content.	Student briefly mentions relevant content of the course to their design, such as postharvest care, botanical nomenclature and identification, or design process.	Student addresses a relevant component of postharvest care, botanical nomenclature and identification, or design process related to their design.	Student communicates synthesis of knowledge in postharvest care, botanical nomenclature and identification, and the design process related to their design.
Present Innovation & Personal Meaning “Personal Well Done” 2 points		Student does not identify a creative component of their completed design that they are satisfied with. Student does not provide personal meaning with the arrangement.	Student briefly mentions a creative component of their completed design that they are satisfied with. Student implies personal meaning with the arrangement.	Student communicates a component of their completed design that they are satisfied with to express their creative mind. Student acknowledges personal meaning with the arrangement.	Student communicates their found meaning within their design and identifies a component of their design that expresses their creative mind. Student defines personal meaning with the arrangement.
Evaluate & Revise Problem Solving “Personal Opportunity for Improvement” 2 points		Student does not identify a component of the arrangement in which they would improve upon for their next botanical arrangement.	Student briefly mentions a component of the arrangement in which they would improve upon for their next botanical arrangement.	Student communicates struggles or problems encountered when designing the botanical arrangement but does not offer a solution to practice remedying the issue in the future.	Student communicates struggles or problems encountered when designing the botanical arrangement and collaboratively finds a solution to practice with the instructor for future designs.
Design Process Define Arrangement, Investigate, Develop Ideas, Present, Create, Evaluate & Revise 3 points		Completed design does not showcase comprehension of all stages of the design process.	Completed design showcases basic comprehension of all stages of the design process.	Completed design showcases comprehension of all stages of the design process.	Completed design showcases mastery comprehension of all stages of the design process.

Postharvest Care, Plant Maintenance, Botanical Identification,
Cut Floral Industry and Botanical Design Readings

(Reading reference list is organized based on content and is not alphabetical.)

Helmer, J.C., Decker, K.S. (1993). *Pictorial Guide to Houseplants*. Kalamazoo, MI: Merchants Publishing Company.

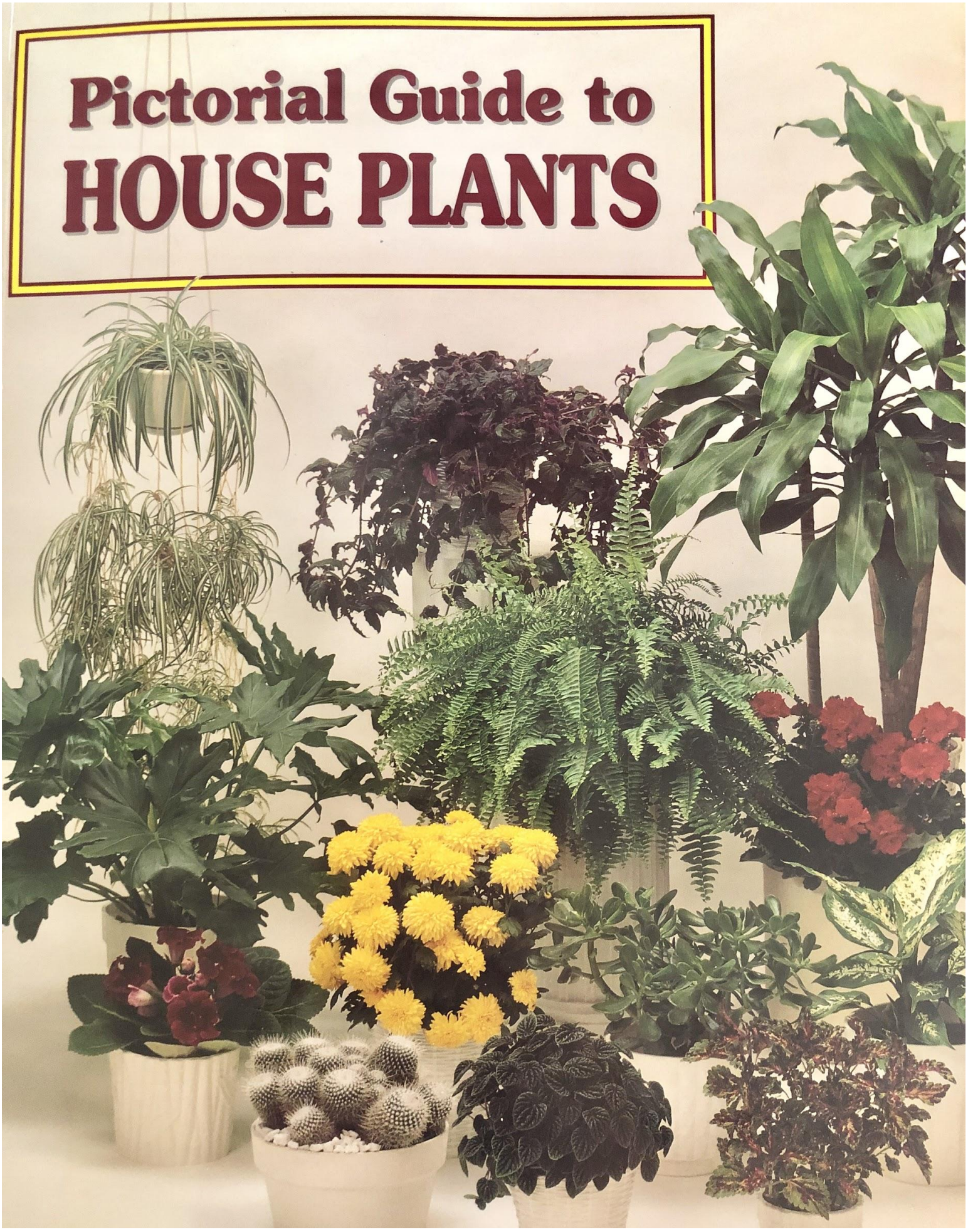
Claffey, B. (2016). *Indoor green: Living with plants*. Melbourne, Australia: Thames & Hudson.

Johnson, J. L., McKinley, W.J., & Benz, M. (2001). *Flowers: Creative design*. Texas A&M University Press: San Jacinto Publishing Company.

Hunter, N.T. (1994). *The art of floral design*. Albany, New York: Delmar Publishers, Inc.

(*Additional readings listed on the first page of the course syllabus*.)

Pictorial Guide to HOUSE PLANTS



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HOUSE PLANT GROUPS

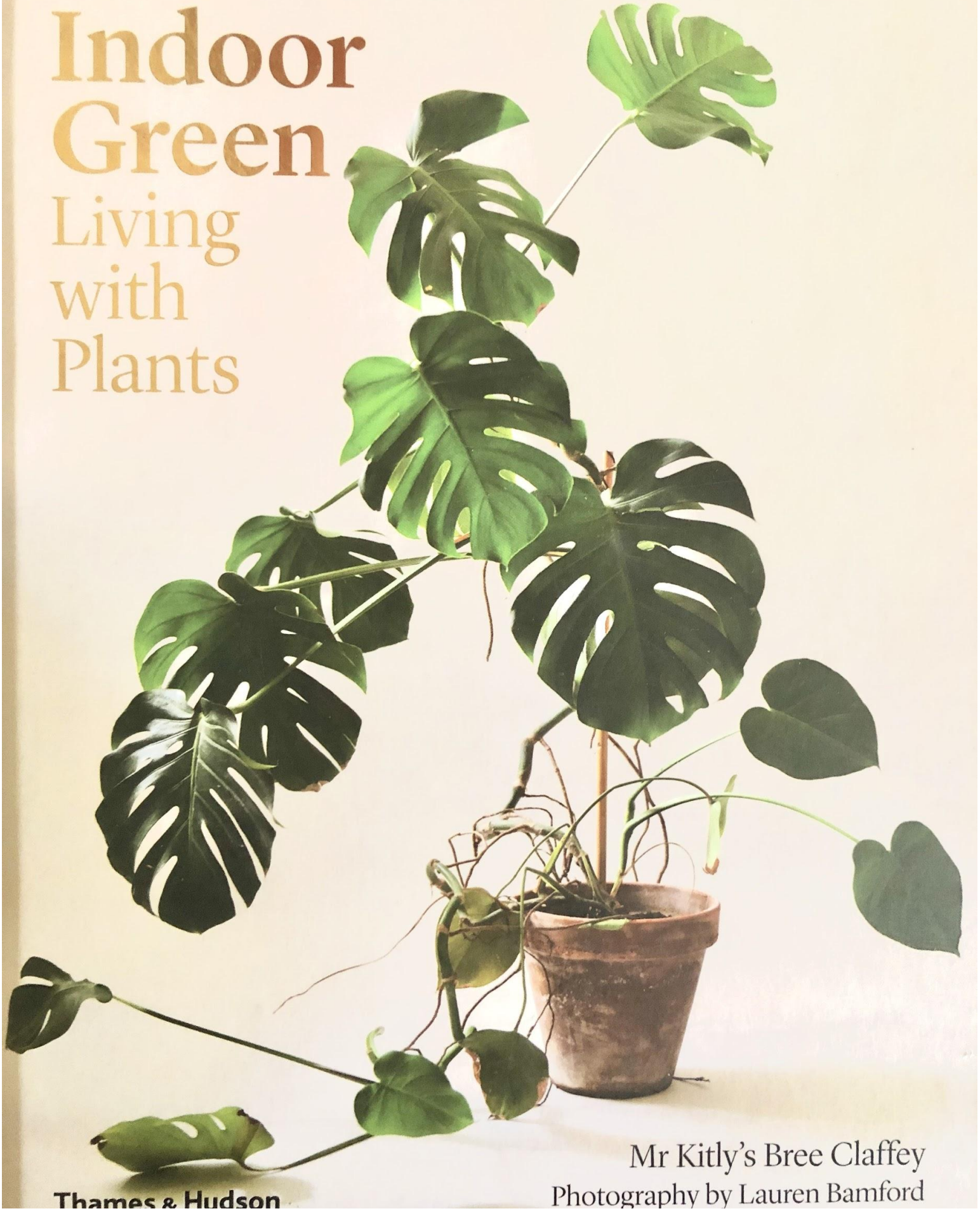
ACKNOWLEDGEMENTS

The author and editor thank the following companies and individuals for their invaluable assistance in providing information, encouragement, and advice throughout the preparation of this book:

Dr. Edward A. Cope, Assistant Curator, L. H. Bailey Hortorium, Cornell University, Ithaca, NY: *Consultant*
Dr. Louis F. Wilson, retired, U.S.D.A. Forest Service; Professor Emeritus, Michigan State University; Punta Gorda, FL: *Consultant*

Indoor Green

Living with Plants



Mr Kitly's Bree Claffey
Photography by Lauren Bamford

Thames & Hudson

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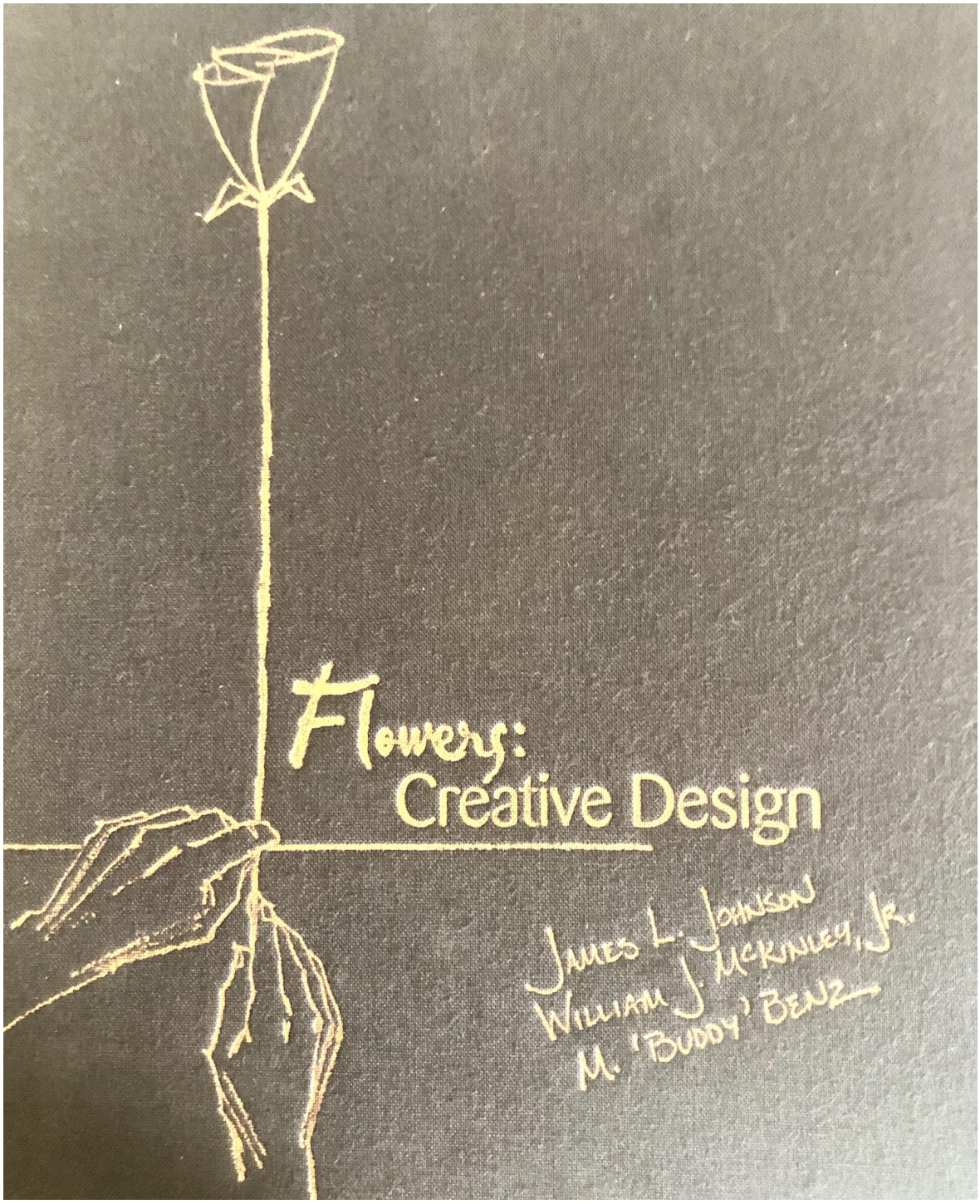
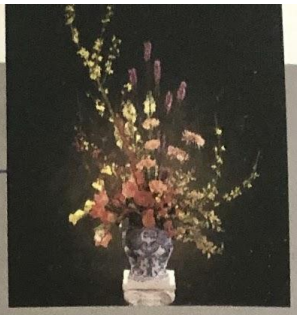

Flowers:
Creative Design
James L. Johnson
William J. McKinley, Jr.
M. 'Buddy' Benz

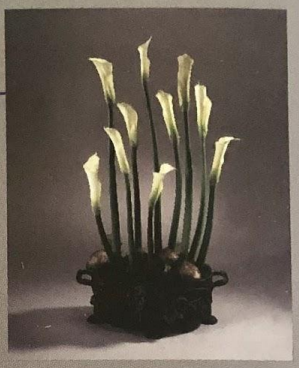
Part 2 – DESIGN STYLES

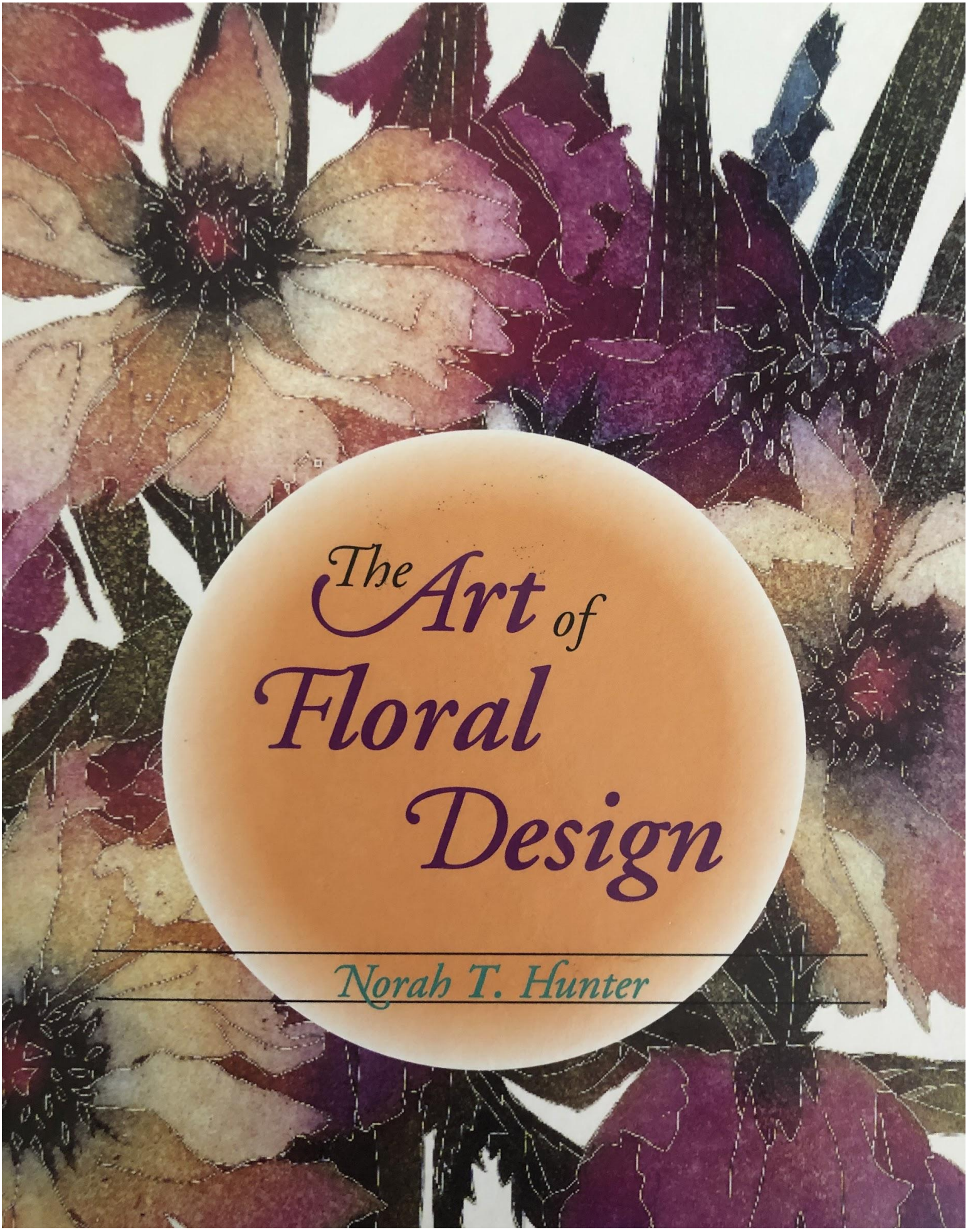
Part 3 – DESIGN COMPONENTS

Part 4 – SPECIAL EVENT DESIGNS - Weddings and Parties

Part 5 – PERSONAL FLOWER DESIGNS






The Art of Floral Design
Norah T. Hunter

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Scientific Theories and Nature Wellness Readings

(Reading reference list is organized based on content and is not alphabetical.)

Haller, R.L., Capra, C.L. (2017). *Horticultural therapy methods: Connecting people and plants in health care, human services, and therapeutic programs* (2nd ed.). Boca Raton, FL: CRC Press.

Kellert, S.R. (2018). *Nature by design: The practice of biophilic design*. London, England: Yale University Press.

Arvay, C.G. (2018). *The biophilia effect: A scientific and spiritual exploration of the healing bond between humans and nature*. Boulder, CO: Sounds True.

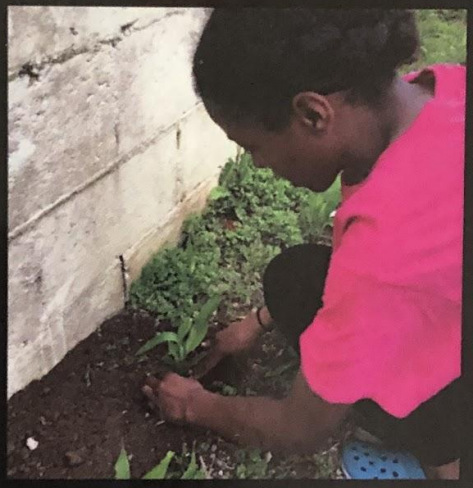
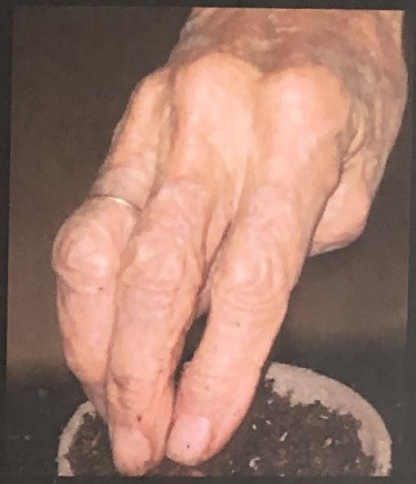
Williams, F. (2017). *The nature fix: Why nature makes us happier, healthier, and more creative.* New York, NY: W. W. Norton & Company, Inc.

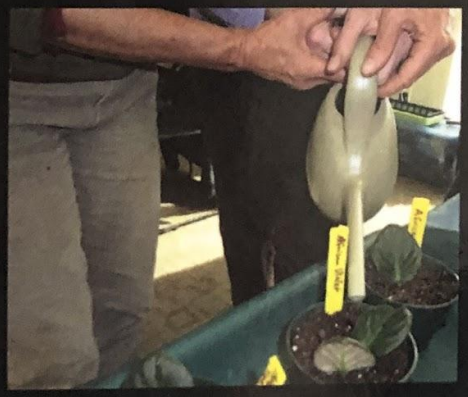
Li, Q. (2018). *Forest bathing: How trees can help you find health and happiness*. New York, NY: Penguin Random House LLC.

(*Additional readings listed on the first page of the course syllabus*.)

Horticultural Therapy Methods

Connecting People and Plants in Health Care, Human Services, and Therapeutic Programs

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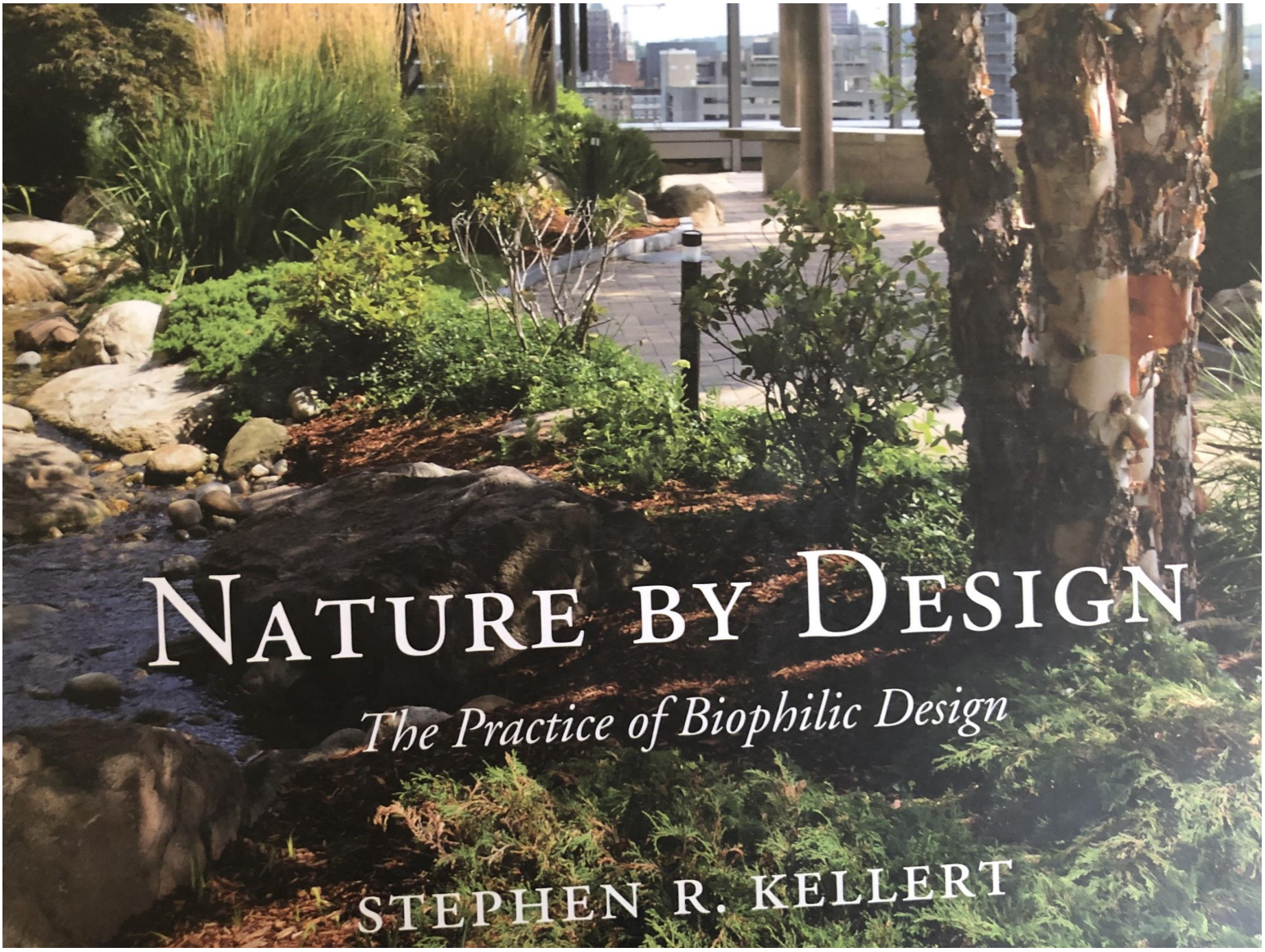
NATURE BY DESIGN
The Practice of Biophilic Design
STEPHEN R. KELLERT

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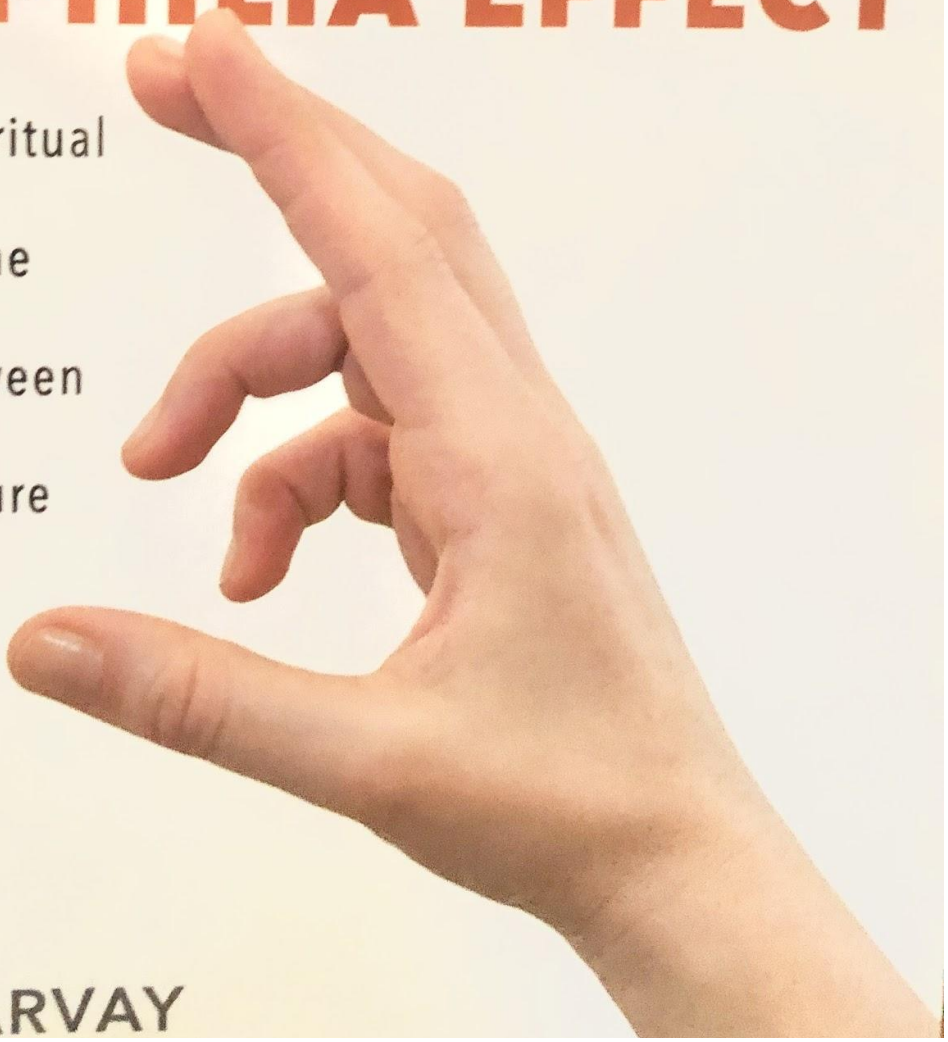
benefits of biophilia–whether in the far wilderness, nearby nature, or in our own homes."

RICHARD LOUV
author of *The Nature Principle* and *Vitamin N*

THE BIOPHILIA EFFECT

A Scientific and Spiritual Exploration of the Healing Bond Between Humans and Nature



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the NATURE FIX

Why Nature Makes Us Happier, Healthier, and More Creative

FLORENCE WILLIAMS

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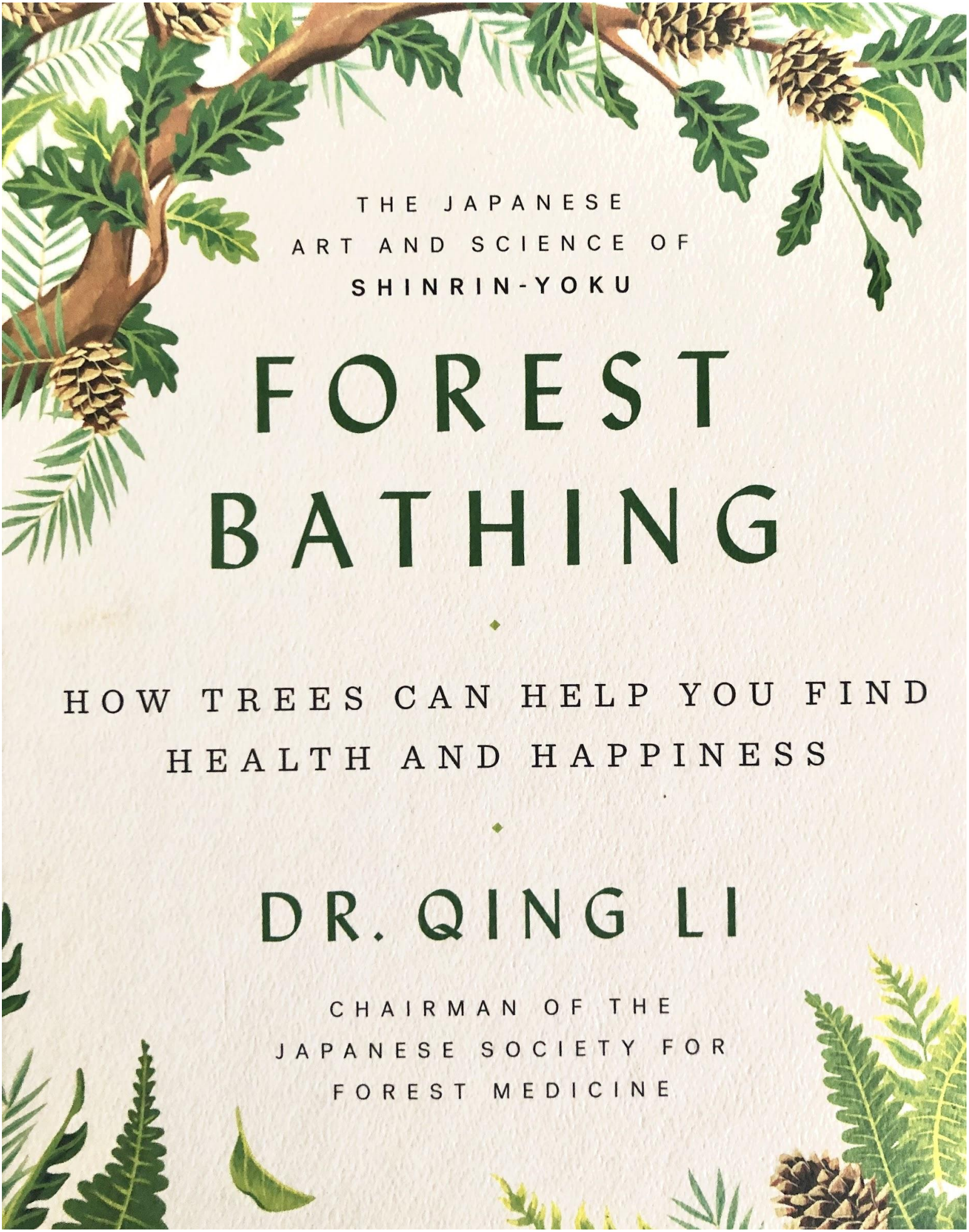

THE JAPANESE
ART AND SCIENCE OF
SHINRIN-YOKU

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DR. QING LI

CHAIRMAN OF THE
JAPANESE SOCIETY FOR
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