Table of Contents
Chapter 1: Getting to Know the Industry ........................................2
Chapter 2: Principles of Design .........................................................7
Chapter 3: Care and Handling ..........................................................11
Chapter 4: Mechanics, Tools, and Containers .................................14
Chapter 5: Wiring Techniques ..........................................................19
Chapter 6: Bow Making .................................................................21
Chapter 7: Types of Flowers ............................................................24
Chapter 8: Floral Arrangements .......................................................26
Chapter 9: Wedding ......................................................................29
Chapter 10: Boutonnieres and Corsages ...........................................32
Chapter 11: Funeral .........................................................................37
Chapter 12: Green Plant Care ..........................................................39
Chapter 1

Getting to Know the Industry

There are many opportunities available in the world of floral design. Careers can be found in the wholesale business, flower shops, management, and sales. In the wholesale business an individual is responsible for buying flowers from growers around the world and they sell them to flower shops. Wholesalers also carry hard goods such as containers, baskets, wire, ribbon, and tools. In a flower shop there are several career opportunities. Managing or owning a shop is focused more on business then on design. These positions are responsible for hiring new employees, training new employees, creating work schedules, keeping shop records, shop promotion, and sometimes making everyday sales.

A sale is a large component in a flower shop. A shop needs skilled, trained, and friendly salespeople because they are the face of a flower shop. Customers will often only interact with a salesperson either on the phone or in the shop. Although a salesperson will not design any arrangements they should be knowledgeable about flowers, flower designs, and how to care for the designs so they can offer a customer an arrangement that will fit their needs.

If a flower shop offers delivery, they need to have a delivery driver. A delivery driver should be able to manage his time efficiently and choose routes that will get all the deliveries to the recipients on time. Drivers should be trained on how to handle flowers so when they load them they will not damage them and if they do they will understand how to fix any damages. A delivery driver should be well groomed and have a dress code and a nice attitude.

Designers are responsible for creating flower arrangements and designing. Ordering flowers and hard goods, processing flowers, understanding basic design principles, and pricing are all responsibilities a designer should understand. In a flower shop there is usually one head designer that carries more of the responsibilities mentioned above. The head designer will
have design assistants and usually the assistants will have less experience and work part time. Design assistants will help with everyday orders and processing flowers.

Each career builds on the other and it would be hard to run a successful flower shop without a skilled individual in each position. Salary for each position will be based on experience, level of education, location of shop, size of shop, and the level of difficulty of the career. A salesperson, assistant designer, and driver will usually start with a minimum wage depending on experience. Some flower shops will offer a salesperson commission for each order on top of their hourly salary. A head designers and managers salary could range from $30,000 on up to $50,000 a year.

**Education**

Education in the floral industry can range drastically. When it comes down to it, the amount of education you would like to receive is strictly up to you. There are many opportunities available to floral designers and they can even range from state to state. Experience and creative ability are the best foundation any florist can have. Gaining experience and working with different designers can help build and diversify your skills. This is a great starting place to begin your education in floral design. Other options could include workshops, certified florist programs, design school, and competitions.

There are a large number of design schools across the United States and the world. This type of schooling usually offers classes both in class and online to teach students everything from business to design basics. Design schools will teach basic skills all the way to more advanced techniques. Once the classes are completed, floral designers can become a CFD, certified floral designer. If a designer has demonstrated and achieved excellence in floral design, they may apply to become certified by AIFD (American Institute of Floral Designers). This is a very high standard for floral designers and requires many qualifications and years of experience. More information can be found on their website.

Most state florist associations will offer workshops throughout the year. Florists who are members of the associations may enroll in workshops to learn new skills or trends for the
upcoming season. Workshops can focus on many areas such as prom, weddings, increasing sales, etc. Florist associations will also offer competitions in flower arranging. These competitions are a great way to show off your skills and learn new skills from fellow designers.

**Selling Flowers**

Customers give life to a flower shop. Focusing on them and learning sales techniques that keep them coming back is essential. Customers will always remember a great experience and they will always remember a horrible experience. Offering a friendly and professional experience is the key to operating a successful business.

The first step to a great experience is making sure the staff is educated about customer service. This means how to talk to customers and how to keep the shop in good appearance. Keeping good appearance means keeping fresh flowers for customers to see, keeping plants watered, and keeping a neat and uncluttered shop. Talking to customers requires a set of certain characteristics. The first characteristic is having a good attitude. Customers want to be greeted with a friendly “Hello, how may I help you”? If a salesperson is confident and happy the customer will pick up on that and trust the salesperson’s judgement. However, an overly happy attitude will not always be appropriate. For example, if someone calls or comes in about a funeral, a salesperson wants to be respectful and reassuring. The second characteristic is being knowledgeable about the products the flower shop sells. Each day, a salesperson should be aware of any specials, flowers available, flower prices, and plants available. If a salesperson has to stop constantly to ask other employee’s questions, a customer may become frustrated, leading to a bad experience. The last characteristic is being an effective salesperson. Every salesperson should remember these elements during a sale: greeting, presentation, and closing. The greeting should be friendly and professional, learn the customer’s name, and make the customer feel important. The presentation is when a salesperson determines the needs of the customer. Ask questions and listen to the customers interests, then suggest merchandise that best fits the customer’s needs. When presenting merchandise, start with a description of the arrangement not the price of the arrangement. But if a customer wants to know a price,
start high and then come down if needed. The closing will decide what product the customer has chosen and the salesperson will offer them reassurance about their choice. The salesperson will then complete the sale by taking a payment and a friendly “thank you for your purchase.”

Taking orders on the phone will follow the same standards, but will have some important points added. When taking an order on the phone, it is important that the phone is answered promptly within two or three rings. If a customer has to be put on hold make sure the customer is aware and agreed to be put on hold and don’t leave them on hold for too long. Collect correct information such as addresses, names, and payment. This can be enhanced by repeating information back to the customer. And lastly, be descriptive because on the phone, customers can’t physically see the flowers.

Another type of order is a wire in and wire out order. Wire services help send orders all across the nation just by visiting a local flower shop. If a customer wants to send an arrangement to another state, they can go to their local flower shop and get them to send it for them. The local florist will find a florist in the area where the order is going, and send it over. There are several networks that a florist can use to send and receive wire orders. Wire orders should be treated the same as any other order: get all the correct information and payment. Most networks will charge an extra fee to send and receive wire orders.

**Pricing Basics**

Understanding prices and markup will ensure that a flower shop makes a profit on the products they sell. Seasonality can affect the prices and a florist will need to understand how to adjust their prices with the season. When determining prices, remember to consider competitor prices, labor cost, and how much it costs to have your shop operate day to day.

To determine a shop’s breakeven point, you need to add up the total expenses of that month and divide that by the number of working days that month. This number is your daily expenses; when daily sales equal daily expenses, you have met your breakeven point. Setting a daily
selling point will help keep this on track and if daily sales are greater than daily expenses, a shop will begin making a profit.

Labor cost is a percentage of retail sales. This cost will vary between everyday design and holiday design, which will drop the labor cost. In order to determine labor cost, a shop must determine how much time a designer spends designing each day. Type of designs, weddings versus a dozen roses, and the expertise required to design will also affect the labor cost. Labor cost will vary from shop to shop.

Determining cost of goods involves a simple set of calculations. When performing these calculations, it is important to round numbers up. The wholesaler will usually sell flowers in bunches and a florist will sell them by the stem. The same concept goes with vases and ribbons. To figure out how much a flower stem costs, use the following formula.

\[
\text{Cost of Bunch} \div \text{Number of Stems per Bunch} = \text{price per stem}
\]

\[
$11.95 \text{ per bunch} \div 25 \text{ stems per bunch} = \$0.478 \text{ stem or } \$.50 \text{ stem}
\]

Once the price per stem is determined, the appropriate markup can be added to each stem. Markups can range from a two time markup to a five time markup. Usually hard goods and supplies have a 2 time mark up and flowers have a three time mark up. Wedding flowers will have a higher markup than everyday flowers because they require more work. These figures will change from shop to shop depending on how much is needed to make a profit and the prices that the wholesalers offer.
Chapter 2

Principles of Design

There are guidelines that floral designers use to enable them to be professional and creative in their work. Each time a designer places a flower into an arrangement they are purposefully placing it there for a reason. The guidelines of floral design are meant to be used together to create a cohesive piece of art that reflects the designer. Mastering and understanding these guidelines will help you become a true floral designer.

Harmony

Harmony is found in a design when there is a pleasing relationship between the components of design. This means that there is a common pattern with the design bringing many elements together, such as color texture, size, or shape. Combining flowers with a fine texture with one that has a rough texture may clash, distracting from the arrangement. The same could also be said for combining certain flowers with certain containers. The main objective with harmony is to make sure that a clear theme exists within the arrangement.

Focal Point

A question you should always ask yourself is, how are you going to attract an audience of people to notice your design? The answer is, to have a focal point. The focal point is where you want to draw the eyes of your viewers. One way to do this is with stem placement. Having all the stems and main lines meet in the same spot will draw the eye to the focal point. Another way to do this is with colors, having the darker colors near the center and the lighter colors around the edges. Size is another aspect to consider when developing a focal point. Having larger and heavier flowers in the center as a focal point and smaller flowers extended outward can also draw the eye to the center of interest. Keep in mind that not all arrangements will
have a focal point. Some arrangements are meant to be appealing from all the way around, thus lacking a particular focal area. Focal points are more commonly found in contemporary arrangements and arrangements with strong lines.

**Balance**

Stability of an arrangement needs to be done both visually and structurally. Imagine there is a line down the center of an arrangement; this line is called the central axis. The axis is the line which will guide you on the principles of balance. Structural balance is achieved through good mechanics. Placing the flowers so there is an equal weight on both sides of the axis is important to prevent toppling over. Visual balance is achieved through proper placement of flowers or object based on their size and color. Flowers that have a dark color and rough texture tend to be on the heavier side, so they are typically placed near the base of an arrangement. Flowers that have a lighter color and smooth texture are place near the edges, giving the arrangement balance.

There are two types of balance, symmetrical and asymmetrical. Symmetrical balance has perfect symmetry. The weight is equal on each side of the central axis. In symmetrical designs, the central stem is always placed first, and then the corresponding side arms. This pattern is often used in formal settings, such as a church. Asymmetrical balance is more informal and natural. Each side of an asymmetrical arrangement may be different, but visual balance exists. This is possible through the correct selection of sizes of material, color, and texture.

**Proportion**

This guideline is similar to balance; it is the relationship between all the components of an arrangement. The components may include size, quantity, container, and environment. Proportion is often referred to as scale when it is being applied to the placement of the arrangement. The scale of an arrangement is decided by the environment in which it is placed and the container it is in. The rule for having a pleasing proportion in a container is the flora and fauna should be \( \frac{3}{2} \) times the height of a container or \( \frac{1}{2} \) times the width of a container.
As far as environment goes, a designer should be aware of the placement of the arrangement. If an arrangement is going on a long wooden table in a banquet hall, the designer is not going to make a dainty little arrangement. Being aware of the color scheme, table shape and size, type of room, and audience will help determine a complimentary arrangement scale and proportion.

**Line**

The path that your eye follows in an arrangement is called the line, which is used to provide a skeleton for the arrangement with linear flowers and foliage. The line can help to convey motion and emotion. Straight lines tend to be more masculine and strong and curved lines are feminine and gentle. It is important to keep a line moving, by making the lines seem like they originate from the same place.

**Rhythm**

Much like the principle of line, rhythm is the flow from line to focal point. The viewer’s eyes must easily transition from all areas of the arrangement starting at the focal point and then moving out to the secondary features of the design. Lines, colors, sizes, and textures can give an arrangement rhythm.

**Texture**

Texture refers to the physical qualities of the surface of the plant materials a designer uses. Texture can be smooth, rough, velvety, shiny, fine, and course. When designing texture, each component should blend together in a pleasing manner or be so contrasting that it compliments each other. Colors can also dictate texture. Delicate, soft colors tend to have the appearance of a fine texture and darker colors tend to have the appearance of a course texture.

**Depth**
To avoid a flat design, floral designers will create depth in their arrangements. Depth is the illusion of distance between the front of a design to the back of a design. Ways to achieve depth in an arrangement are through overlapping, angling of stems, and size. Overlapping flowers and foliage gives a greater sense of depth. Placing larger sized flower low and in the front of a design with smaller flowers towards the back helps to add depth to a one sided arrangement. And lastly, angling tall stems backwards and stems that come out in front, downwards will add balance and depth.

**Color**

Color is a very important aspect of design. People have their favorite colors, certain colors convey an emotion or meaning, and some colors can change your mood. If an arrangement was beautifully crafted but in the wrong color, a disappointed customer will only notice the color is wrong. An arrangement that is structured well and made up of harmonious colors will be very popular. One way to master and understand color is to study a color wheel. The color wheel is made up of primary, secondary and tertiary colors. On one side are the warm colors, reds, oranges, yellows, and on the other side are the cool colors, greens, blues, and violets.

Combining colors to set the mood and emotion of an arrangement is important. This is called color harmony. There is monochromatic, analogous, complementary, and triad color. Monochromatic color is a scheme that consists of one hue. The hue may vary in shade and texture to provide interest. Analogous color is the use of three or more hues, only one being a primary color, in sequence on the color wheel. Complementary color is the combination of contrasting colors. A good rule of thumb when choosing colors is to choose hues that are on the opposite side of the color wheel. Triad color is choosing colors that are equally spaced on the color wheel.
Chapter 3

Care and Handling

To ensure the happiness of customers and long lasting flowers, proper care and handling should be put in place. Knowing how to properly care and handle cut flowers can slow down their deterioration. But before you ever get the flowers you should choose flower and plant wholesalers that are reliable and have good products. When choosing flowers and plants from wholesalers, you want to avoid and keep an eye out for any mold, slimy stems, or dry and dead foliage.

When an order of flowers have come in to be processed and sold, it is important that they are taken care of accordingly to slow down deterioration. Flowers lose water naturally through a process called transpiration. Transpiration occurs when moisture is transpired out of the flower quicker than it is taken in resulting in wilting. The most important thing you can provide your flowers with is water. Water temperature can depend on the type of flower you are processing. If you are unsure what temperature to use, lukewarm water will usually be sufficient.

Bacteria

To prevent bacteria growth, which reduces the life of flowers, it is important to practice good cleanliness. Buckets that stems are placed in should be cleaned with bleach or antibacterial soap. The cooler should also be kept clean by washing the floor of the cooler and regularly changing water in buckets that have been in the cooler. And most importantly, clean off all the foliage on the lower portion of the stems. Foliage that is left on the stems and submerged under water will eventually rot producing bacteria.
Ethylene Gas

Ethylene gas hastens the aging process in flowers. Symptoms of ethylene gas are premature aging, drooping of leaves, flowers, and berries, yellowing foliage, and changes of petal color. Ethylene damage will be increased if flowers are exposed to fruit and vegetables.

Flower Food

Flower food can be added to vases and buckets of freshly cut flowers to help extend their life. Sugar, bactericide, and an acidifier can be found in floral food. The sugar is used as a source of energy for the flowers, the bactericide prevents the growth of bacteria, and the acidifier affects the pH of the water, creating an environment to enhance water uptake through the stem. Follow the directions the flower food provides to know how much to add to vases.

Conditioning

Conditioning is allowing flowers to remain in warm water outside the refrigerator for a certain amount of time until they have absorbed enough water to become turgid. A good amount of time for flowers to condition is one hour. You will know when the flowers are ready when the stem is hard and strong. Some flowers that come in such as lilies, carnations, alstromeria may be kept out of the refrigerator for a few days to allow them to open.

Hardening

Once flowers have been conditioned and allowed to rehydrate, they should be placed in the cooler and allowed to harden. The flower needs to be cooled to slow down transpiration. Allowing flowers, especially roses, to harden at least an hour before they are used in any arrangements is ideal in extending their life.

Processing

Below is a set of steps that should be done to promote the longevity of cut flowers:
1. Prepare clean buckets using bleach or antibacterial soap, remember to rinse thoroughly.
2. Unpack and inspect flowers for any problems such as mold or broken heads. (Some roses will keep the cardboard sleeves on to prevent them from opening)
3. Gently clean lower leaves, making sure none will be below the water line.
4. Recut stems with a sharp knife or clippers.
5. Place the stems into a clean bucket with water that is the appropriate temperature and preservatives.
6. After flowers have conditioned, place them into a refrigerator.
Chapter 4

Mechanics, Tools and Containers

Floral design can involve many tools and materials. Design mechanics are a part of good design techniques and involve the materials that designers use when arranging. Choosing materials that enhance the beauty, stability, and quality of the flowers and the design are important factors in floral design. Mechanics come with experience and practice which will help enhance your creativity and success in floral design.

Containers

The foundation of any design is the container. Designers choose containers that will add to their design, not distract away from it. Containers come in a variety of textures, shapes, sizes and colors. Some categories of containers are functional, contemporary, and novelty. Functional containers are practical, hold a lot of water, durable and are suitable for many different environments. Practical in this case means that these containers are inexpensive and not fragile. Some examples would be baskets, glass vases (999’s and 907’s), machè, plastic urns, and bamboo boxes. Contemporary containers are elegant and are still visually appealing without flowers. These containers are usually expensive, fragile, and made from crystal, porcelains, fine metals, etc. Novelty containers can be random objects that weren’t made to hold flowers such as a mug, a cowboy boot, etc.

Foams

Floral foams are fast, easy to use, and make a great foundation, if used properly. Foams can come in different shapes and sizes. Most foam comes in bricks, but you can also find it in
spheres, cylinders, wreaths, bouquet holders, spray cages, and more. Floral foam is usually green but you can also find it in colors to match your design needs.

To prepare foam properly follow the instructions very carefully. The key to using foam is to soak it thoroughly in water with floral food added. You always want to avoid having any dry spots inside, so don’t rush the soaking process. Once the foam has soaked, you can use the foam, as necessary. Floral foam is easy to cut and can be shaped to fit whatever container is being used. If the whole block is not being used, the leftovers can be left to soak in a bucket of water or allowed to dry out. When placing the foam into the container make sure to leave room under and around the foam to add water. Secure the foam with tape (waterproof tape will work best). When placing flower stems into the foam, it is best to cut them at an angle to create a tight fit into the foam to prevent falling out and a resistance to take up water. If a stem is pulled out, it is important that the stem be recut and moved to a different spot to prevent an air pocket, which prevents hydration. A popular brand of foam is called Oasis® and you may hear foam referred to as oasis. Another type of foam is dry foam, which is used in silk or permanent flower arrangements. Dry foam does not need to be soaked in water but can be cut and used as it is.

**Cutting Tools**

Floral design would be difficult without good cutting tools. Good tools help you make clean cuts, work faster, and prevent injuries. Taking care of your tools is very important, so make sure to maintain them and use them correctly.

The first tool that every designer should have is a knife. A good knife is a designer’s best friend. Floral knives come in different shapes and sizes. For instance, they can have straight or curved blades or they can be folding or non-folding. It is important to find a knife that is the right size for you. Find a knife that is comfortable for you to cut with and keep in your hand while not cutting. It is more efficient to keep a knife in your hand between cutting the stem and placing it in an arrangement. If you stop to put down your knife after each cut and then pick it up it, can
become time consuming. Also remember to learn how to keep your knife sharp to ensure clean cuts and less injury.

When using your knife, you want to hold it between your thumb and index finger. If it is your first time using a floral knife, it may seem awkward, but it is important to practice and start slow to prevent cutting yourself. When cutting floral stems, you want to make the cut towards yourself at an angle. If a stem seems too thick or hard, don’t use a knife, instead use a pair of clippers.

Clippers are useful if you are trying to cut larger flower stems. They can be used to design, but they may be a slower approach compared to using a knife. Some clippers can even be used to cut wire. Clippers come in different sizes and the size determines how big of a stem it can cut. Another name for clippers would be shears.

Wire cutters, as the name implies, are used to cut wires. They can also be used to cut the stems of silk flowers.

Ribbon scissors will be helpful when cutting ribbon. Having scissors that specifically cut ribbon will help ensure a straight and clean cut, avoiding any fringe or unraveling. An important note is to only use ribbon scissors on ribbon. If they are used on anything else, they will become dull and will not cut very well.

**Adhesive Materials**

Adhesive materials in floral design include tape, glue dots, glue, and cling. These materials can be very helpful in many different aspects of floral design.

Tape can be used in a variety of ways, from holding foam in a container to making a grid across a vase to secure flowers. Floral tape comes in a variety of forms, the most popular being waterproof tape, clear tape, and stem wrap. Waterproof tape is used to secure wet foam to containers. It can come in green and white and you can get ¼”, ½”, or 2” width. Clear tape is usually used to create a grid across the top of a vase and comes in ¼” or ½” width. Stem wrap
is used in corsages and boutonnieres to cover wire or picks. This tape has a waxy exterior and when stretched, it sticks to itself. It can come in a variety of colors from green to blue.

Glue dots and glue strips are clear pieces of adhesive that can be used for many general purposes around a flower shop. Glue strips can be cut down to any size you need and glue dots are already pre-cut. They can be used to wrap ribbon around a wedding bouquet or vase or attaching cellophane to a fruit basket. When applying, make sure you have a clean and dry surface.

Glue is commonly used in floral design, especially in corsage work. The different types of glue include hot glue, floral adhesive, and stem adhesive. Hot glue is commonly used in silk flowers and can be heated in a pan or in a glue gun. Floral adhesive or Oasis® glue is most popular in corsage work; it has replaced the use of wire, making corsage work quicker. This type of glue is fast drying and waterproof, but can become messy if you are not careful. Stem adhesive is used to lock stems into foam and comes in a spray can with a straw that helps get the glue down into the hole the stem is in. This type of glue is used in bridal bouquets that are in a bouquet holder.

Cling or clay is a sticky material used to anchor candles, frogs, figurines, and more. It is very easy to work with and can be cut to size and easy to roll. Clay works best if you adhere it to a dry, clean surface, and will even stick if you add water on top of it.

**Picks, Water Tubes, Floral U Pins and Chenille Stems**

Wooden and steel picks are used in floral design. Wooden picks have a wire at the end and are used to add length, attach bows to plants, and support flowers. Steel picks are used in silk arrangements. They are added to the end of a silk flower stem using a steel pick machine, and are stuck into the dry foam anchoring in the stem.

Water tubes and picks are small tubes with tight fit caps that hold water without any leakage. Water tubes and picks can be used in wrapped arrangements or for flowers that have short stems that can’t reach a water source.

Floral U pins are small, silver pins that are used to attach moss or greenery to floral foam.
Chenille stems, or more commonly known as pipe cleaners, are used to make bows and attach wreaths, garland, and other floral designs to railing, chairs, and easels without scratching.
Chapter 5

Wiring Techniques

Wiring flowers and foliage is a mechanism that florists use on several different occasions and it is a basic skill that every florist has. Wiring can be used for several different reasons, such as strengthening and straightening a weak stem or to add a curve or a desired position to a straight stem. Most commonly, wire is used in corsages and boutonnieres to replace the bulkiness of the natural stems. Wire can also be used for decorative purposes like being wrapped around a vase or in a bouquet.

Wire comes in many sizes, known as gauges. A gauge is determined by the weight and diameter of the wire. Usually, a smaller gauge indicates a thicker wire and a larger gauge indicates a thinner wire. So, the largest gauged wire is a No. 16 and the smallest is a No. 30. The most common gauges of wire are 20, 26 and 28; these sizes will satisfy any wiring needs. Selecting the proper size wire to use for your flowers is very important, because if you use a size that is too thick, you may damage the flower and if you use a wire that is too thin, the flower may not be properly supported, resulting in drooping.

The methods of wiring vary greatly from florist to florist, because designers may have their own preferences on how it should be done. However, it is important to have a basic knowledge of wiring so below are some commonly used wiring methods.

Hook Method

This method is commonly used on weak flowers with flat heads that break easily at the base of the head. Start by choosing the correct size wire and bend the end of the wire to make a small hook. Before inserting the wire, remove any leaves that may be on your flower with your fingers or a knife. Gently insert the straight end of the wire into the top of the flower being
careful not to damage the flower. The objective is to get the wire to come out at the base of the flower. If it is easier, you can insert the wire through the base and then make the hook. Next, pull the wire down until the hook disappears into the center of the flower head. If you are using this method for corsage or boutonniere work, the stem should be removed with a ½ inch remaining below the calyx. If you are using this method for an arrangement, carefully twist the wire around the stem of the flower. The flower can now be taped with green floral tape if needed.

**Piercing Method**

The piercing method is used on flowers that have an enlarged calyx. If this method is being used in a boutonniere, start by cutting the stem below the calyx to one inch, then gently insert the wire through the calyx halfway between the base of the calyx and the petals. Once the wire is about halfway through the calyx, bend both ends of the wire down. Next, if the flower is being used in a corsage, you will wrap the flower in floral tape making sure that all exposed wire is covered.
Chapter 6

Bow Making

In floral design it is important that one have knowledge of how to use accessories correctly, especially bows. Bows are used constantly in corsages, funeral work, and potted dish gardens and plants. Knowing how to correctly tie a bow takes practice and is required if you plan to work in floral design.

Ribbon comes in all sizes, textures, prints, and colors. Ribbon can be double-faced or single-faced, meaning it either has the same finish on both sides or it is shiny on one side and dull on the other. Ribbon materials can also vary. For instance, you can find ribbon made of lace, sheer material, burlap, velvet, cotton, or satin. The type of work you are doing helps determine the type of ribbon you will be using. For example, with wedding work, you usually use a satin, lace, sheer or even burlap ribbon. These ribbons have a finer texture that makes them more appropriate to use. Size is another big factor when it comes to deciding what type of ribbon you will be using. Ribbon sizes come with a corresponding number. For example, a number 9 ribbon is 1 and 3/8 inches wide. Some of the more popular ribbon sizes are number 3 (5/8 “), number 9 (1 3/8 “) and number 40 (2 ¾ ”).

<table>
<thead>
<tr>
<th>Ribbon No.</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>¼”</td>
</tr>
<tr>
<td>1 ½</td>
<td>5/16”</td>
</tr>
<tr>
<td>3</td>
<td>5/8”</td>
</tr>
<tr>
<td>5</td>
<td>7/8”</td>
</tr>
<tr>
<td>9</td>
<td>1 3/8”</td>
</tr>
<tr>
<td>16</td>
<td>2”</td>
</tr>
<tr>
<td>40</td>
<td>2 ¾”</td>
</tr>
</tbody>
</table>
When tying a bow, you need to make it according to the design in which you are using it. Size of the bow and the number of loops it has depends on what the bow is being used for. For example, funeral work typically receives bigger bows, number 9 and up, with more loops. Just remember that the bigger the work, the bigger the bow. Tying a bow takes practice so don’t get frustrated your first time. When beginning, you should start with a smaller size ribbon that is made with a fine to medium texture until you understand the basics of tying a bow. Follow the steps below to start learning the method of bow tying.

Step 1. To start, you will need single faced number 3 ribbon and a chenille stem. Cut a 3 ½ yard long piece of single faced, number 9 ribbon. A trick to know that you have about 1 yard is to pull the ribbon from your fingers to your shoulder.

Step 2. Starting with the shiny side up, take the end of the ribbon and measure up a few inches leaving a tail, this is where you will begin your bow.

Step 3. Pinching the ribbon between your thumb and forefinger, you are going to make a 1 inch loop. Always remember that you want the shiny side of the ribbon up. Carefully pinch the ribbon between your thumb and forefinger tightly, making sure it doesn’t slip.

Step 4. Next, twist the ribbon, because after making the loop the dull side will be showing and we want to twist the ribbon to expose the shiny side. Make sure the twist is tight and be careful not to let the ribbon slip from your fingers.

Step 5. Repeat making loops that are slightly larger than the previous loop and remember to twist

Step 6. Once the desired amount of loops is made (6 to 8), tie the bow tightly with a chenille stem. Extra strips of ribbon can be added to create streamers.
Step 7. Holding the bow in your hand pull the loops and separate them to give your bow a good shape.

Also, remember that this is just a foundation for you to start learning. You may come across different methods at different florists because some shops have different approaches on how to create bows.
Chapter 7

Types of Flowers

When it comes to flowers, there are many different varieties, shapes, and colors. It is up to the florist to understand what flowers are needed to fill orders and which flowers are the most in demand with their customers. Keeping up with flower inventory and ordering the correct flowers and correct amounts is very important for any retail florist.

In the floral design world, flowers are categorized differently depending on what use they have. The categories include mass flowers, form flowers, line flowers, and filler flowers. It is ideal that a florist has a wide variety of each type of flower to readily fill orders.

Line Flower

Line flowers are used to give an arrangement a frame. The line flower will be used to define the shape, height and width for the arrangement you are making. Usually, when designing, you will insert this flower first to clearly define the shape you wish for your arrangement to have. These flowers typically are longer and taller with multiple flower heads on one stem. Certain types of twigs, foliage, or accessories could be used as a line flower. Examples include delphinium, snapdragons, bells of Ireland, and larkspur.

Form Flower

This type of flower has a unique or distinctive shape. Adding this flower to an arrangement means that it will be your focal flower. When adding in form flowers, you need to keep in mind that less is more. Form Flowers are meant to be seen, so make sure to give them space within the arrangement. Examples include iris, lilies, protea, and birds of paradise.
Mass Flower

This type of flower usually has a single larger head on a single stem and is usually round in shape. They are named mass flowers because they add weight and depth to your arrangement. It is important to remember that more than one type of mass flower can be used in a single arrangement, and by adding a variety of colors, size, spacing and depth, you can create a complex arrangement pleasing to the eye. Examples included roses, sunflowers, hydrangea, and carnations.

Filler Flower

These flowers are usually added last to fill space in an arrangement, giving the appearance of fullness and depth. Filler flowers should be smaller in size then the other flowers in the arrangement. Typically, filler flowers have smaller multiple heads on a single stem, making them bunchy and bold but they could be more feathery and delicate. It is important not to add too much filler, distracting attention from the other flowers. Examples include baby’s breath, wax flower, caspia, and heather.
Floral Arrangements

Floral arrangements can come in many different shapes and sizes depending on what they are being used for. Location, container, flower choices, occasion and a customer’s needs and wants are a few of the things that can affect the outcome of a floral arrangement. For instance, if a customer needs a centerpiece for their 8 foot long dining room table, then a long, low, all sided arrangement would be made. Making the arrangement long and low emphasizes the shape of the table while also making sure it doesn’t get in the way of anyone at the table. Making it all sided is important as it will be viewed on all sides. However, if you needed to make a piece for a fireplace mantel or a church alter, you would more than likely make it one sided (being viewed from only one direction) depending on how it would be viewed and shaped according to the scale and level you would like it. These are all things to consider when designing a floral arrangement and it is up to your skill and knowledge to design and shape an arrangement suitable for any occasion. Some common shapes that are seen in arrangements are circular, line, and triangular.

Greening

Greening vases and containers can help a designer create a strong arrangement. Greening helps to hide mechanics and stems and it creates a strong cross grid that holds flowers in place. Foliage and moss can both be used to green a container. Moss is great for covering floral foam, but it would not be used in a vase arrangement. Foliage such as leatherleaf fern, pittosporum, salal, ruscus, and eucalyptus are popular for vase arrangements and arrangements created in floral foam. There is no right or wrong way to green a vase as long as the mechanics are covered, the greens are clean, greenery is not in the water, and the greens do not overwhelm
or cover the flowers. Everyone has a particular way they like to green things; some people like to green after adding flowers and some like to green before adding flowers.

Creating Bud Vases

Bud vases can be popular arrangements because of their convenient size and price. They are also a great starting point for beginning designers. Various flowers can be used in bud vases along with accessories such as bows, wire, butterflies, etc. Bud vases are created in a vase with a slender neck, holding a smaller number of stems. Roses are typically used in bud vases, in sets of 1 to 4 roses. Below are directions to construct a 3 bloom rose bud vase.

Step 1. Collet Materials:

- 3 roses
- 3-4 stems variegated pittosporum
- 3 stems myrtle
- 1 stem purple limonium
- 1 yard of number 3 sheer ribbon
- 22 gauge wire
- Wooden pick
- Bud vase

Step 2. Fill bud vase with water and clean the thorns and foliage from the roses.

Step 3. Add pittosporum to bud vase, making sure to remove any leaves that are below the water line. When adding greenery, try to cross the stems as this will act as a grid to keep the flowers in place.

Step 4. Take the smallest rose and cut it so it is twice the height of the container.

Step 5. Take the medium size rose and cut it so it falls one inch below the tallest rose. When placing the rose in the vase, stagger it in the opposite direction from the first rose; don’t place them directly underneath one another.
Step 6. Take the largest rose and cut it so it is one inch below the middle rose; remember to stagger the roses.

Step 7. Select long and tall pieces of myrtle and place one piece behind the tallest flower and the rest framing the outside of the vase, creating long lines. The myrtle should be no more than one and half inches taller than the roses.

Step 8. Insert the purple limonium to fill up any empty space in the arrangement.

Step 9. Add a bow attached with a pick to the bottom center of the arrangement right above the rim of the vase.

Step 10. Refrigerate until ready to use.
Weddings can come in all shapes and sizes, but a common element is flowers. Customers are very particular about their wedding flowers and they have standards they want met. It is the florist’s role to use good judgement to sell the flowers, ideas, and planning to the customer. Discussing ideas and having examples in the form of pictures is a must when sitting down with the customers.

Before ordering any flowers for weddings, a florist should set up a consultation to discuss the flower needs. Consultations are a great way to get to know a customer and the feeling they want their wedding to have. Usually, more than one consultation will be required before the day of the wedding. It is important to have a set of questions you ask for every wedding consultation. Some questions could be:

- When is the wedding?
- What are the colors?
- How large is the wedding? How many bridesmaids and groomsmen?
- Where is the ceremony and reception?
- What type of gown is the bride wearing?
- What type of flowers interest you?
- What type of bouquet would you like to carry?

These are just a few example questions to get your consultation started; there is an endless supply of questions you could ask. Just remember to be tasteful and respectful during the consultation.
Usually, once a consultation is complete, a florist will fill out a wedding order form which describes the flowers, pieces to be made, and the prices. This form will serve as a contract between you and the customer. Once everything has been reviewed, the florist will set up a payment plan for the customer to follow. You may want to require a deposit before you order the flowers.

Bouquets

An important element and primary focus of most weddings is the bride’s bouquet. Bouquets can be constructed with a wide variety of materials and made to be any size suitable for the bride. Most brides prefer a round, hand tied bouquet with elegant flowers like hydrangea, roses, and peonies.

Below are different styles of bouquets. Designers all over the world have their individual differences when it comes to assembling each type, but the basic concepts are the same everywhere. For this section we will just be discussing the types of bouquets and important elements that go into making each one. If you wish to see the steps that go into making each bouquet, refer to the videos on the GALA Floriculture website.

Hand Tied

Hand tied bouquets are a very popular type of wedding bouquet. They can be round, compact and tight, or they can be loose and airy with a garden feel. A hand tied bouquet is a grouping of flowers whose stems are arranged in such a manner that it creates a spiral effect. By placing the stems in this manner it creates a wider bouquet and prevents the stems from breaking. Ribbon is usually wrapped around the stems of the bouquet. This type of bouquet is very versatile and the flowers that are chosen affect the feeling the bouquet will have.

Some other types of bouquets that could fall under the hand tied bouquet category include nosegay, posy, and biedermier. Both nosegay and posy bouquets tend to be on the smaller side with compact flowers. Biedermier bouquets are created by grouping the same flower together in the bouquet.
Cascade bouquet

Cascade bouquets are bouquets where the flowers spill downward in an elegant and flowy way. This type of bouquet can be made in a bouquet holder or hand tied. When using a bouquet holder, it is important that the stems be secured in the holder with glue. In a hand tied cascade, the cascade part is made by taping and wiring flowers. Delicate, smaller flowers are used toward the tip of the cascade to create a natural graceful look.

Composite

A composite bouquet is made up of petals from a single flower. Composite bouquets can be made using a wiring method or a gluing method. Typically, composite bouquets are made from roses.

Pomander

A pomander bouquet is a round ball, covered with flowers and is held with a ribbon. This bouquet is made with floral foam that has been soaked in water. Glue is used to keep the flowers from falling out of the arrangement.

Ceremonial Decorations

Other flowers included in a wedding are aisle decorations, alter pieces, buffet pieces, table center pieces, and cake flowers. Each of these pieces should be complimentary to the wedding party flowers which can be done by using the same color scheme or using the same flowers. Some weddings will be larger, including all of the pieces mentioned above, but some weddings may be smaller, only having flowers for the bridal party. Certain religions can also limit what decorations can be used, so it is important to cover those details in the wedding consultations. It is also important to remember where the flowers are going. For instance, if the wedding is going to be in an informal setting like a barn, you don’t want to suggest formal centerpieces in nice crystal vases.
Chapter 10

Boutonnieres and Corsages

Corsages and boutonnieres are flowers worn by both men and women for special occasions such as a wedding, a funeral, and prom. Women typically wear corsages, and they can either have a wrist corsage or a pin on corsage. Men typically wear boutonnieres, and they are typically pinned on or worn with a magnet and consist of one to three flowers. When customers order corsages or boutonnieres, they want them to complement their clothing or the event they are attending. Because of this, it is important that the selection of materials is appropriate and that a detailed order be taken. Customers will usually have strong opinions about what flowers, filler, greenery, and ribbon they want in their corsages or boutonnieres, so it is up to you to help direct their vision into something appropriate and wearable. It is important to keep in mind the principles of design when creating corsages and boutonnieres. Even though they are much smaller, keep in mind proportion, weight, depth, balance, focal point, size, and good mechanics.

Boutonnieres

Flowers that are used for boutonnieres should be able to hold up well without water. Many flowers can be used to create a boutonniere such as roses, carnations, alstromeria, orchids, blue delphinium, and much more. There is no one, right way to create a boutonniere. As long as the principles of design are present and there are good mechanics, you can be as creative as you would like. Other components that can be used in boutonnieres are filler flower, greenery, ribbon, or wire.

Below are steps to create a single rose boutonniere with greenery.

Step 1. Collect your materials:

- 1 single rose
- 1-2 small pieces of Italian ruscus
- 1 piece of 24 gauge wire
- Light green florist tape
- 2 boutonniere pins

Step 2. Cut the stem about an inch or less below the calyx. Take the wire and use the piercing method to insert the wire into the rose.

Step 3. Take the florist tape and tape the stem. Make sure that the tape begins that the top under the calyx covering the wire and twist the tape until you reach the bottom of the wire.

Step 4. Take a piece of Italian ruscus that is in proportion to the rose and strip the bottom leaves. Usually, you want the ruscus to just barely extend beyond the top of the rose. Take the florist tape and wrap the ruscus stem, starting from the top and going down about a half inch, then cut the ruscus stem to prevent bulkiness. Continue taping the stem.

Step 5. Make sure to smooth the tape and then cut the stem to make it 2 inches in length. The wire at the base can be left straight or curved. Insert the pins, mist the flowers with water, and refrigerate until it’s ready to be used.

**Pin On Corsage**

Pin on corsages are similar to boutonnieres and are usually worn on a women’s shoulder. They typically range in sizes depending on the size of the person wearing it and the occasion. A wedding corsage would need to be more formal and a baby shower corsage would be more fun, using props such as a pacifier. Other components include filler flower, greenery, or ribbon.

Below are steps to make a 3 bloom pin on corsage using spray roses.

**Step 1. Collect materials:**
- 3 spray roses
- 3 pieces of Italian ruscus
- 3 pieces of baby’s breath
- 24 gauge wire
- Floral tape
- Number 3 ribbon
- 2 Corsage pins

Step 2. Cut the stem of each spray rose head about an inch or less from the calyx. Take the wire and use the piercing method to insert the wire into each spray rose.

Step 3. Tape the stem using florist tape. Make sure that the tape begins at the top under the calyx covering the wire, and twist the tape until you reach the bottom of the wire.

Step 4. Take a piece of Italian ruscus that is in proportion to the spray rose, and strip the bottom leaves. Usually, you want the ruscus to just barely extend beyond the top of the spray rose. Take a small piece of baby’s breath and place it in front of the spray rose. Take the florist tape and tape the ruscus and baby’s breath to each of the spray roses. Make sure to trim the stems of the ruscus and baby’s breath to reduce bulkiness. Repeat on each spray rose.

Step 5. Take the smallest spray rose to go at the top of the corsage. Attach the second spray rose in a staggered pattern with a couple twists of floral tape, not taping all the way to the bottom.

Step 6. Attach the third spray rose in a staggered pattern with a couple of twists of floral tape. Take wire cutters and cut two of the wire stems, leaving only one. Continue taping the stem all the way down, covering any exposed wire.

Step 7. Make an appropriate bow and attach it with wire under the third spray rose, and tape over the wire with floral tape.

Step 8. Carefully bend and adjust the flower heads and bow at your discretion and smooth the stem. Cut the stem so it is 2 to 3 inches long and keep the stem either straight or curved. Insert the corsage pins, mist the flowers with water, and refrigerate the corsage until it is ready to be used.
**Wrist Corsage**

Assembling wrist corsages can be done by wiring or gluing. Gluing has replaced wiring because it is faster. The type of glue you can use is called floral adhesive. It is not recommended to use hot glue because it can be difficult to work with and can cause injury to you and the flower, so floral adhesive is a nice alternative. Using glue can be messy meaning it is important to control the glue so it doesn’t end up on the flowers, ribbon, or band.

Wrist corsages can range from simple to elaborate, depending on the accessories used. Bands come in many different materials and colors. You could stick with a basic elastic band or you can choose one that has rhinestones, beads, pearls, or large gemstones. Wrist bands come with a small plastic or metal plate that acts as the base for the corsage and protects the bracelet from the glue. Usually, a florist will offer a wide variety of wristbands for their customers to choose from. Other accessories can include feathers, gemstones, metal leaves, wire, LED lights, and ribbon.

Below are steps on how to assemble a basic 5 flower corsage using alstromeria.

**Step 1. Collect materials:**

- 5 alstromeria blooms
- 5-8 small sprigs of baby’s breath
- Number 3 ribbon
- 5 to 7 Italian ruscus leaves
- 4 Italian ruscus stems
- 1 chenille stem
- Floral adhesive glue
- Wrist band

**Step 2. Start by tying a bow using number 3 ribbon.** The size of the bow depends on the size of the corsage. You don’t want the bow to outshine the flowers, so making a bow with 6 to 8,
one-inch loops is a good starting point. Tie the bow off with a chenille stem and pull the loops into place to shape the bow.

Step 3. Take the 4 Italian ruscus stems and lay them on top of each other, alternating ends. Attach the ruscus stems under the bow using the chenille stem. Trim the excess chenille stems to an inch and twist and flatten them under the center of your greenery.

Step 4. Glue Italian ruscus leaves to the plate found on the corsage wristlet. You want to make sure that the plastic or metal plate is covered and not visible. Allow them a few minutes to dry.

Step 5. Apply glue onto the center of the plate you covered with leaves. This is where you will attach our bow and greenery. You want to make sure that the greenery is going parallel to the arm of the wearer or the opposite way of the band. Make sure that the chenille stem makes contact with the glue and then hold the bow in place until it is dry. To help the glue stick faster you can blow onto the glue before you attach the bow.

Step 6. Cut the stem of each alstromeria bloom directly under the calyx. If you find that the stem is too long, you can keep trimming it until it fits nicely into the corsage. Dip the first bloom into the glue and place it in the center. Sometimes, you may want to hold the flower in place while the glue dries so it doesn’t move out of place. Remember to not skimp on the glue; if you don’t use enough you may risk the flower falling off later. Continue to dip each of the remaining flowers in glue and place them around the middle flower. Try to equally space each of the flowers from one another.

Step 7. Add in baby’s breath to fill in any open spaces.

Step 8. Allow the corsage to stay out to dry; this could take anywhere from 15 to 30 minutes. Allow the glue to dry before cooling so it does not fall apart. After drying, mist the flowers with water and refrigerate the corsage until it is ready to use.

There are many different ways that corsages and boutonnieres can be made and will vary from florist to florist.
Chapter 11

Funeral

Flowers help to express many emotions. Funeral flowers help loved ones say one last goodbye in a beautiful and appropriate way. During this time it is very important to be respectful and helpful to the family. They are turning to floral designers to help them pay tribute to their lost ones, and designers should be knowledgeable of appropriate designs and flowers. When taking funeral orders, it is very important that the date, time, and location of the funeral be confirmed; this can be done by being in contact with the funeral home. It is also important to take down all the correct information to avoid misspellings or wrong names. Personal messages are usually included in funeral work. The sender wants to pay their condolences to the family, and we must make sure everything is taken down correctly.

Popular funeral pieces include casket sprays, standing sprays, baskets, wreaths, set pieces, and potted plants. For this section we will just be discussing the types of funeral pieces and important elements that go into making each one. If you wish to see the steps that go into making each piece refer to the videos on the GALA Floriculture website.

Casket Sprays

Casket sprays sit on top of a casket. They come in full size and half size, full size covers the entire casket when it is closed and half caskets are used when a casket is open. Casket sprays are made onto a saddle, which is floral foam on a curved base. When making casket sprays, it is important to make them so they flow gracefully over the casket. Casket sprays are mostly one sided, but it is recommended that a few flowers be added to fill in the back. When starting a casket spray, it is helpful to add in line flowers that will make up the skeleton and then add in other secondary flowers. Casket sprays can either be a symmetrical or asymmetrical design.
Standing Sprays and Wreaths

Standing sprays are floral arrangements in a foam cage that are displayed on easels. This tends to be one of the more popular funeral arrangements. Standing sprays can be made in many different styles and forms, and the type of flowers used depends on the price and the family’s requests.

Wreaths are constructed in a similar manner as sprays except they are made on a round foam wreath. The size of the wreath can range from 6 to 24 inches, and the size of the wreath is chosen based on the price of the arrangement.

Baskets

Funeral Baskets can come in plastic or wicker material. Designing baskets requires designing in front and behind the handle. Adding flowers and greenery on both sides will create a balance in the design. The more popular shapes for funeral baskets are triangular and fan shaped, but the design can go more contemporary at the discretion of the family.

Set Pieces

Set pieces are shaped funeral arrangements, such as a cross or heart. Shapes can come precut, but sometimes a family may have an odd request that will require a designer to cut out the shape. These types of funeral pieces can be emotional and meaningful to the family and they can also require a lot of materials and time.

Potted Plants

Potted plants are a popular alternative to cut flowers because they last longer and are less expensive. Potted plants can either come as one plant in a basket or urn or they can come as a dish garden which is several plants in a ceramic bowl. Preparation of a potted plant includes a bow, a care tag, a liner, and well watered.
Living plants are a popular alternative to cut flowers. Some people are interested in giving something that will last more than a week. Living plants come in a variety of forms, there are large single potted plants, blooming plants, tropical plants and dish gardens composed of multiple plants in one container. Plants can be decorated with containers, bows, and accessories. Common containers are baskets, pottery, ceramic containers, and much more. Customers who call and want to order a plant usually ask what plants you have, do any of them have blooms, and what are the care requirements. A florist should have basic knowledge about living plants to be able to answer all of these questions.

Most customers will probably not be familiar with the scientific names of the plants they are looking for. Common names are usually used and can vary greatly. If a customer asks for a plant and you are not familiar with the name you can ask questions about descriptive features to help narrow down the search. Knowing scientific names can help when ordering plants from the wholesalers, because it will help guarantee that the right plant is delivered. A plant’s scientific name is in Latin and consists of a genus and species, sometimes followed by a cultivar or variety.

**Basic care**

Understanding light requirements helps florist recommend particular plants to their customers. If a plant is going to someone’s work where there is no natural light, you should suggest a plant that is low maintenance that requires low light. Types of light requirements are low light, medium light, and high light.
Understanding how much and when to water plants can make or break plants. A flower shop will carry multiple types of plants, so scheduling when to water plants may be different for each plant. Temperature, season, and the size of the plant will also affect when and how much to water plants. One way to tell if plants need to be watered is drooping. If a plant starts to droop it should be pulled out of view from the customers and watered until it is back to normal. Another way to determine if a plant needs to be watered is to stick your finger into the soil to feel if the soil is dry or moist.

In the table below are common plants found at a florist and their care requirements.

<table>
<thead>
<tr>
<th>Plant Name</th>
<th>Flowering Plant</th>
<th>Light Requirements</th>
<th>Water Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Violet</td>
<td>Yes</td>
<td>Moderately bright light, not direct sun</td>
<td>Moderately moist soil is preferred, water when soil surface is dry to the touch</td>
</tr>
<tr>
<td>Azalea</td>
<td>Yes</td>
<td>Moderately bright light, not direct sun</td>
<td>Keep soil uniformly moist, soil should not dry out</td>
</tr>
<tr>
<td>Bromeliad</td>
<td>Yes</td>
<td>Bright diffused light, can tolerate low light</td>
<td>Moderately moist soil is preferred, water when soil surface is dry to the touch</td>
</tr>
<tr>
<td>Bulb plant (hyacinth, tulip, daffodil)</td>
<td>Yes</td>
<td>Can tolerate a wide variety of light conditions</td>
<td>Moderately moist soil is preferred, water when soil surface is dry to the touch</td>
</tr>
<tr>
<td>Christmas Cactus</td>
<td>Yes</td>
<td>Bright light, avoid direct sunlight</td>
<td>Moderately moist soil is preferred, water when soil surface is dry to the touch</td>
</tr>
<tr>
<td>Chrysanthemum</td>
<td>Yes</td>
<td>Moderately bright light, not direct sun</td>
<td>Moderately moist soil is preferred, water when soil surface is dry to the touch</td>
</tr>
<tr>
<td>Cyclamen</td>
<td>Yes</td>
<td>Moderately bright light, not direct sun</td>
<td>Moderately moist soil is preferred, water when soil surface is dry to the touch</td>
</tr>
<tr>
<td>Dish Garden</td>
<td>Sometimes</td>
<td>Bright diffused light, avoid direct sunlight</td>
<td>Moderately moist soil is preferred, water when soil surface is dry to the touch</td>
</tr>
<tr>
<td>Dracaena</td>
<td>No</td>
<td>Bright diffused light, can tolerate low light</td>
<td>Keep soil uniformly moist, soil should not dry out</td>
</tr>
<tr>
<td>Ferns</td>
<td>No</td>
<td>Moderately bright light, not direct sun</td>
<td>Keep soil uniformly moist, water when soil surface is dry to the touch, humid</td>
</tr>
<tr>
<td>Plant</td>
<td>Light Requirements</td>
<td>Soil Requirements</td>
<td>Atmosphere</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------------------------------------</td>
<td>--------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Gardenia</td>
<td>Bright light, avoid direct sunlight</td>
<td>Moderately moist soil is preferred, water when soil surface is dry to the touch</td>
<td></td>
</tr>
<tr>
<td>Gloxinia</td>
<td>Moderately bright light, not direct sun</td>
<td>Moderately moist soil is preferred, water when soil surface is dry to the touch</td>
<td></td>
</tr>
<tr>
<td>Hydrangea</td>
<td>Bright light, avoid direct sunlight</td>
<td>Keep soil uniformly moist, soil should not dry out</td>
<td></td>
</tr>
<tr>
<td>Kalanchoe</td>
<td>Bright light, avoid direct sunlight</td>
<td>Moderately moist soil is preferred, water when soil surface is dry to the touch</td>
<td></td>
</tr>
<tr>
<td>Lilies (Easter Lily, Hybrid Lily, Oriental Lily)</td>
<td>Bright diffused light, avoid direct sunlight</td>
<td>Moderately moist soil is preferred, water when soil surface is dry to the touch</td>
<td></td>
</tr>
<tr>
<td>Orchid</td>
<td>Moderately bright light, not direct sun, low light is tolerated</td>
<td>3 oz of warm water each week</td>
<td></td>
</tr>
<tr>
<td>Philodendron</td>
<td>Moderately bright light, not direct sun, low light is tolerated</td>
<td>Moderately moist soil is preferred, water when soil surface is dry to the touch</td>
<td></td>
</tr>
<tr>
<td>Poinsettia</td>
<td>Bright diffused light, avoid direct sunlight</td>
<td>Moderately moist soil is preferred, water when soil surface is dry to the touch</td>
<td></td>
</tr>
<tr>
<td>Rieger Begonia</td>
<td>Bright light, avoid direct sunlight</td>
<td>Moderately moist soil is preferred, water when soil surface is dry to the touch</td>
<td></td>
</tr>
<tr>
<td>Spathiphyllum, Peace Lily</td>
<td>Low light, avoid direct sunlight</td>
<td>Keep soil very moist, drain excess water, soil should not dry out</td>
<td></td>
</tr>
</tbody>
</table>

**Common plant problems**

Understanding common problems in plants and how to remedy them can help a florist prevent plant loss and losing money. Over watering can cause leaves to turn yellow, leaf wilt, leaf drop, root rot, brown leaf tips and margins, and gnats. Under watering causes leaves to wilt and drop off. Low light causes tall and spindly growth, leaf drop, and a lack in bud production. High light or too much light can burn leaves, causing them to look grayish or whitened. Lack of fertilizer can cause poor growth and yellow leaves and too much fertilizer can cause brown leaf tips and
margins and leaf drop. Low humidity can cause brown leaf tips and margins, yellow leaves, leaf drop, bud drop, and wilting.