

Module 1



The Perfume Artisan

PERFUME ORIGINS
PERFUME TERMINOLOGY
FRAGRANCE FAMILIES
SCIENCE OF SCENTS

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The Perfume Artisan: A Course on Perfume Making From Beginning to the End and Beyond

Have you ever paused to inhale the delicate scent of a blossoming rose, felt energized by the zesty tang of a freshly peeled citrus fruit, or found yourself soothed by the earthy aroma of a dense forest? Scents have a unique power to transport us, to evoke memories, and to stir emotions. If you've ever wondered about the secrets behind these invisible works of art, this course is your invitation to step into the fascinating world of perfume making.

After taking this course you will:

- *Get familiar with the history of perfume.*
- *Understand fragrance terminology.*
- *Identify fragrance families.*
- *Learn the science behind smelling.*
- *How to source essential oils. Their quality and options.*
- *Know the roles and options of synthetic aromachemicals.*
- *Learn about carrier oils and perfumer's alcohol.*
- *Go through the equipment perfumer's need.*

- ***Learn the Perfume Pyramid.***
- ***Get familiar with blending techniques.***
- ***See what Preservatives and Fixatives are.***
- ***Discover different ways to produce your own perfumes and MORE!***

For those interested, we'll touch on the exciting world of opening a perfume business. This will include:

- ***Bottle Design and Labeling.***
- ***Branding and Marketing.***
- ***Safety and Regulations.***

Whether you're a curious hobbyist, an aspiring entrepreneur, or simply seeking to deepen your appreciation for the artistry of perfume, this course promises to awaken your senses and ignite your creative spark. Join us, and let's embark on an olfactory adventure.

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Module 1: Introduction to Perfumery

The Birth of Fragrance: Ancient Origins

The journey begins in the cradle of civilizations, Mesopotamia and Egypt. The earliest recorded use of fragrance is traced to ancient Mesopotamia, 3,500 to 4,000 years ago, where incense were burned during religious ceremonies. Egyptians also mastered the art of using scented balms, oils, and resins not only for rituals, but for personal adornment and medicine.

The Bible's Old Testament offers an account of God instructing His people on the preparation of sacred incense for use in the Tabernacle (Exodus 30:23-25). This passage provides some of the earliest documentation of specific ingredients used in fragrant compositions.

Perfume through the Years -

The Greeks and Romans were inspired by the Egyptians. They lavishly used fragrance in baths, personal grooming and even scented their homes and theaters. They took perfumery to another level by getting more scientific about it. They figured out how to extract the good-smelling oils from plants and invented new ways to make perfumes last longer.

The next big jump happened with the Arabs. Arab traders were able to bring exotic spices and ingredients to the area, expanding the perfumer's palette. They developed new techniques like distillation, allowing them to extract pure essential oils, especially rose water and create even more complex and potent scents. Perfume became a symbol of luxury and was used for both personal enjoyment and medicinal purposes.

European Renaissance and the Rise of Modern Perfumery -

While perfume use waned during the early Middle Ages, it made a strong comeback as trade routes reopened; but perfume was a luxury good primarily enjoyed by the wealthy in Europe. It was primarily used to mask unpleasant smells and as a status symbol. During this time, perfume was also believed to have medicinal properties and was used to ward off disease.

A milestone occurred in 1370 with the creation of Hungary Water, the first alcohol-based perfume that was commissioned for Queen Elizabeth of Hungary. This marked a shift towards liquid perfumes.

In the year 1533 France entered the picture of perfumery. This was the year Catherine de' Medici married Henry who later became King of France. When she came to France from Italy she brought her perfumer with her, Renato Bianco and introduced him to the French court. This sparked France's fascination with perfume and resulted in France's dominance in perfumery for centuries to come.

Industrialization Transforms Perfume -

The invention of synthetic fragrances in the 19th century was a game-changer. No longer reliant solely on natural ingredients allowed perfumers to create new scents that weren't possible before and made perfume more affordable for everyone.

Scents continued to evolve as perfume artisans learned from the passed down knowledge of their predecessors. Today, perfume is a huge industry with all sorts of perfume competing to be worn.

With today's online technology, it is allowing smaller companies and even individuals to step back in time and make more unique and natural fragrances once again for people and to continue perfume's ever changing journey through time.

Perfume Terminology

Notes: Individual scents that make up a fragrance. There are three main categories:

- **Top Notes:** The first impression, scent of the fragrance. These are light, fresh, and evaporate quickly.
- **Heart Notes:** The core of the fragrance, emerging as the top notes fade.
- **Base Notes:** The rich, long-lasting foundation that provides depth of the fragrance.

Accord: A harmonious blend of several notes that create a distinct smell. Accords can be simple or complex.

Projection: How far the fragrance radiates from the wearer.

Nose: A term for a perfumer – someone with a highly developed sense of smell and the skill to create fragrances.

Fragrance Pyramid/Wheel: A visual representation of how fragrance families work together.

Olfactory Families: Broad categories used to classify fragrances:

- **Floral:** Dominated by flower scents (rose, jasmine, etc.).
- **Citrus:** Bright and zesty (lemon, bergamot, orange, etc.).
- **Woody:** Warm and earthy (sandalwood, cedar, patchouli, etc.).
- **Oriental (Spicy):** Warm and sweet (amber, vanilla, incense, etc.).
- **Gourmands:** These are natural and synthetic scents that smell like anything edible.

Sillage: The trail a fragrance leaves behind the wearer.

Longevity: Refers to how long a fragrance lasts on the skin.

Dry Down: The final stage of a fragrance as the base notes become dominant.

Absolute: An absolute is a highly concentrated, fragrant liquid that is extracted from plants. It is considered one of the purest and most potent forms of fragrance ingredients.

Eau Fraiche: Translates to “fresh water”. It’s the lightest concentration with around 1-3% fragrance/essential oil.

Eau de Cologne (EDC): This is the next lightest concentration; typically 2-5% concentration.

Eau de Toilette (EDT): A little stronger concentration, but still pretty much light; typically 5-10% concentration.

Eau de Parfum (EDP): A popular concentration with good longevity; typically 10-20% concentration.

Extrait de Parfum: This is the most concentrated form of fragrance; typically 20-45% concentration or higher. The scent is more potent and longer lasting.

Natural: Derived from plants, animals, or other natural sources.

Synthetic: Created in a lab, often used to replicate natural scents or create unique aromas.

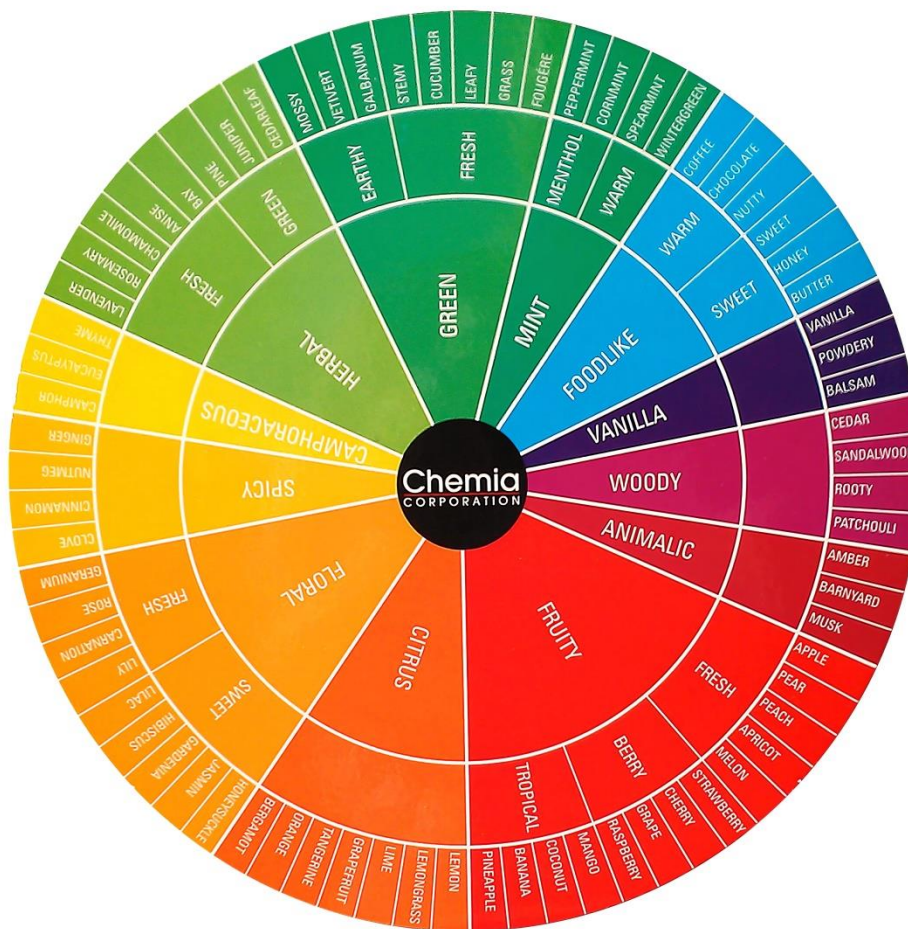
Infusions: These are the process of extracting fragrance and aromatic compounds from natural materials by steeping them in a carrier substance, such as carrier oil or perfumer’s alcohol.

Tinctures: These are alcoholic extracts of natural raw materials, like plants, that are soaked in alcohol to release their natural scents. They are powerful, life-like fragrances that are naturally sourced, rather than lab produced.

Understanding Fragrance Families

What is the Fragrance Wheel?

- The Fragrance Wheel is a great place to start for understanding fragrance families. A fragrance wheel is a circular diagram that categorizes fragrances based on their scent characteristics and how they relate to one another. It's a helpful tool for understanding scent families and how to combine fragrances. You can research the “fragrance wheel” online or in books and you will see hundreds of different versions. From a very simple wheel to a very complex one. I am inserting a picture of one that is somewhere in the middle. It was prepared by Paul Kiler.



Why is it Useful?

- **Navigating Perfumes:** It simplifies a complex world of scents, making comparisons and choices easier.
- **Understanding Fragrance Preferences:** Helps identify favorite scents and explore similar options.
- **Perfume Creation:** Serves as a guide when blending fragrances, ensuring a balanced and harmonious composition.
- **Making It Your Own:** As you explore different blends and see what works together beyond the wheel, you can add different scents to your own fragrance wheel.

The Basic Structure:

- **Four Main Families:** Most wheels are divided into four major quadrants:
 - * Floral.
 - * Oriental (Spicy).
 - * Woody.
 - * Fresh (Green).
- **Sub-Families:** Each main family is further divided for subtle differences within that family. (e.g., Cedar and Sandalwood in 'Woody').
- **Variations between Wheels:** Like I said, there are a lot of variations. Some have their own unique focus and approach. Some wheels, for example, emphasize the relationship between different fragrance notes, while others focus on the historical development of fragrance families. You can start with one that you like and as you progress through

learning and experimenting you can add to it creating a variation of your own.

Key Fragrance Families:

I want to give a breakdown on the four most important families that you will be encountering as you start. By no means are the families and sub-families limited to what is written below.

1. Floral

Characteristics: Floral notes are often associated with romance, femininity, and beauty. They can evoke feelings of love, joy, and tenderness. Many floral scents are known for their delicate and soft nature. They can create a sense of elegance, grace, and sophistication. Floral notes can range from fresh and clean to sweet and powdery. They can add a touch of brightness and vibrancy to a fragrance.

Sub-families:

- Honeysuckle.
- Lilac.
- Gardenia.
- Carnation.

Popular Examples:

- **Chanel No. 5:** This timeless classic features a bouquet of florals, including jasmine, rose and ylang-ylang, creating a sophisticated and elegant fragrance.

- **Gucci Flora by Gucci:** This fragrance celebrates the different facets of femininity with a blend of peony, rose and osmanthus, resulting in a youthful and romantic scent.
- **Miss Dior Blooming Bouquet by Dior:** A delicate and fresh fragrance, Miss Dior Blooming Bouquet features notes of peony, damask rose, and white musk that creates a light and airy scent perfect for everyday wear.

2. Oriental (Spicy)

Characteristics: Spices bring a sense of warmth and coziness to a fragrance. They can evoke feelings of comfort, energy, and even sensuality. Spicy notes add depth and complexity to a fragrance, making it more interesting and multifaceted. They can create a sense of mystery and intrigue.

Sub-families:

- Clove.
- Cinnamon.
- Nutmeg.
- Ginger.

Popular Examples:

- **Opium by Yves Saint Laurent:** A classic oriental spicy fragrance with notes of clove, cinnamon, coriander and pepper that are blended with warm amber, vanilla, and patchouli. It's a bold and sensual scent.
- **Spicebomb by Viktor & Rolf:** A modern spicy fragrance for men with notes of cinnamon, pink pepper, chili, saffron, and tobacco. It's a warm and seductive scent with a touch of sweetness.

- **Obsession by Calvin Klein:** A warm and spicy oriental fragrance with notes of cinnamon, coriander, clove and amber that are blended with vanilla, musk and civet.

3. Woody

Characteristics: Woody scents often evoke the natural world, reminding us of forests, trees, and soil. They can create a sense of grounding and connection to nature. Woody notes are often associated with masculinity, strength, and sophistication. They can add a mature and refined touch to a fragrance.

Sub-families:

- Cedar.
- Sandalwood.
- Rooty.
- Patchouli.

Popular examples:

- **Terre d'Hermès:** A sophisticated and earthy fragrance for men, featuring notes of cedar, vetiver and patchouli that are blended with citrus and pepper.
- **Wonderwood by Comme des Garçons:** A complex and intriguing woody fragrance with notes of cedar, sandalwood, vetiver, pepper and nutmeg. It's a warm and spicy scent with a touch of sweetness.
- **Encre Noire by Lalique:** A dark and mysterious woody fragrance for men with notes of cypress, vetiver, cashmere wood and musk. It's a deep and smoky scent with a touch of sweetness.

4. Fresh (Green)

Characteristics: Green scents have an uplifting and refreshing effect, making the wearer feel energized and renewed. They're perfect for daytime wear and can boost mood and well-being. Green fragrances capture the scents of nature, reminding us of freshly cut grass, leaves, herbs and forests. They create a sense of grounding and connection to the outdoors. Green scents often have a clean, crisp, and transparent quality, similar to the fresh air after a rain shower.

Sub-families:

- Vetivent.
- Grass.
- Mossy.
- Leafy.

Popular Examples:

- **Chanel No. 19:** A classic green floral fragrance with notes of galbanum, hyacinth, iris and oakmoss. It's a sophisticated and elegant scent with a touch of bitterness and warmth.
- **Vent Vert by Balmain:** A fresh and green floral fragrance with notes of galbanum, hyacinth, jasmine, and oakmoss. It's a classic and invigorating scent that evokes the feeling of springtime.
- **Philosykos by Diptyque:** A woody and green fragrance with notes of fig leaf, fig, cedar and coconut. It's a unique and evocative scent that captures the essence of a fig tree.

Additional Families:

- **Animalic:** The animalic family in perfumery refers to scents that are reminiscent of animalistic odors, often creating a warm, sensual and somewhat primal effect. These scents can range from musky and leathery to honeyed and even slightly fecal. Animalic notes are often used in small amounts to add depth, warmth, and complexity to a fragrance. They can create a sense of intimacy, seduction and even danger.
- **Citrus:** The citrus family in perfumery is characterized by its bright, refreshing, and zesty scents, derived from the oils of various citrus fruits. These fragrances are often associated with sunshine, happiness and energy, making them popular choices for uplifting and revitalizing perfumes.
- **Gourmand:** The gourmand fragrance family is a delightful and mouthwatering category of scents that evoke edible treats and delicious desserts. These perfumes often feature notes like vanilla, chocolate, caramel, coffee, honey, almond and other sweet or savory culinary ingredients.

Important Takeaway:

- Fragrance families are a guide, not strict rules. Personal preference plays a major role along with experimentation. Some individuals naturally gravitate to certain families over others.

The Science of Scent: How Our Sense of Smell Works

It Starts with Odor Molecules:

Most of the nose's nasal cavity is used to filter the air for our lungs, but at the back of the nose is where the magic happens for scent.

When we take a breath in through our nose we are breathing in odor molecules. Everything we smell are releasing these tiny molecules and that is what our nose is detecting.

The Olfactory Epithelium:

At the back of the nose there is a small area called the olfactory epithelium that has millions of receptor cells that are covered in a layer of mucus. These receptor cells are special neurons that sense smell. These neurons are part of our nervous system and our nervous system is the way our brain sends and receives messages.

Different Shapes, Different Scents:

As the odor molecules come across these receptors they are caught in the layer of mucus and then bind with the receptors. Different odor molecules trigger different neurons. It's kind of like and key fitting into a lock activating that receptor.

With millions of receptor neurons, we have a wide range of smells we can distinguish; around 10,000 different smells.

Signals to the Brain:

Once the receptors are triggered they send an electrical signal along the olfactory nerve to the olfactory bulb – located just above the nasal cavity and at the base of the brain.

The olfactory bulb acts like a sorting station, organizing the signals based on receptor type. This pattern creates a 'scent map'.

The olfactory bulb then sends the information to several brain areas:

- **The Limbic System:** Responsible for emotions, memories, and instinctual behaviors (this explains the strong link between scent and memory.)
- **Higher Cortical Areas:** For conscious identification and analysis of the smell.

An Activity to Try:

Get as many people as you can to do this. The more people involved, the more fun.

The Blind Smell Test: A Sensory Exploration

Setup –

- **Materials:** Gather different items with distinctive smells. A mix of familiar and less common is ideal.
- **Procedure:**
 - * Take turns being blindfolded.
 - * Present one item at a time for that person to smell, without revealing what it is.
 - * Ask them to describe the scent (sweet, spicy, earthy, etc.) and try to guess the item.

What Does This Activity Reveal?

- **The Power of Visual Cues:** Even familiar items become trickier to identify when sight is removed. We rely heavily on visual information to help categorize scents, even before they fully register in our brains.
- **Subjectivity of Smell:** Different people will have varying reactions to the same smell. Some may find it pleasant, others unpleasant. This links to individual variations in olfactory receptors and scent memories.
- **Scent & Memory:** Certain smells may trigger strong, unexpected memories or emotions before we even consciously identify the source. This demonstrates the close connection between scent and our limbic system.
- **Limitations of Describing Scent:** You may struggle to find appropriate words to describe a smell. This highlights the challenge perfumers face when trying to communicate their creations.

Discussion Points:

- Did any smells evoke strong memories or emotions? Why?
- How was the experience different with a blindfold?
- Were there any surprises? (Items you thought you could recognize, but couldn't.)

Interesting Notes:

- **Sense of Smell and Taste:** Our perception of flavor is heavily influenced by our sense of smell, that's why food seems bland when we have a cold.

- **Individual Variations:** Our genetic makeup influences the number and type of olfactory receptors we have, making us more or less sensitive to certain smells.
- **Anosmia:** This is the condition of not being able to smell at all, due to various causes.