# JOAN MORAIS

COSMETICS SCHOOL

# Professional Natural Hair Care Formulation Diploma Course Curriculum

WELCOME Lifetime Course Access 14 Modules / 210 Lessons / 170+ Training Videos / 60 Formulations Approximate Study Time: 167 Hours

WELCOME TO PRO HAIR

#### INSTRUCTIONS FOR TAKING THIS COURSE

Downloads: Guide: Pro Hair Study Curriculum

#### RESOURCES

Resource Links and Store Equipment Suppliers: Container and Packaging Suppliers: Cosmetic Ingredients Supplier Discount Codes Cosmetic Ingredients / Raw Materials Labels Lab Furniture Testing: pH and Microbial Standards, Regulations, Certifications Learn More/Classes Software/Apps

Trade Publications Contract Manufacturing Liability Insurance Books Plant-Based Scarves and Pillow Cases Discount Codes and Updates Supplier Discount Codes Course Updates The Formulators Glossary

#### **MODULE 1: HAIR**

#### <u>Lessons</u>

• Module 1 Downloads

Pro Hair Course Training Manual Cover Module 1 Hair Hair Thoughts

- Hair
  - Hair Expression
  - Hair Expression is a Journey
  - Is it Hair Care or Haircare?
- Hair Heritage
  - African Hair, Caribbean Hair
  - African American Hair
  - Hair Holds Memory
  - Asian Hair
  - Caucasian Hair, European Hair
- Studies and Professions of Hair
  - Trichologist
  - Cosmetologist
  - Hair Stylist
  - Loctician

- Hair Colorist
- Expert Guest Aminah Lawson: Author of The Time Factor
  - Module 1 Wrap-Up
  - Assignment #1

# MODULE 2: THE SCIENCE OF HAIR

#### <u>Lessons</u>

• Module 2 Downloads

#### Module 2 Science of Hair Hair Type Focus

- The Science of Hair
  - Hair Physiology
  - Hair Chemistry
  - Hair Anatomy
  - Hair Structure
  - Hair Growth Cycle
- Hair Shape Hair Pattern
  - Straight
  - $\circ$  Wavy
  - $\circ$  Curly
  - $\circ$  Coily
- Hair Texture
  - Fine
  - Medium
  - Thick (Course)
- Expert Guest: Aminah Lawson: Natural Textured Hair
- Hair Typing Systems
- Hair Types
  - 1A, 1B, 1C
  - 2A, 2B, 2C
  - 3A, 3B, 3C

- 4A, 4B, 4C
- Men's Hair Care
- Hair Density
  - $\circ$  Low
  - Medium
  - $\circ$  High
- Hair Porosity
  - Low
  - Proteins and Amounts to Use for Low Porosity Hair
  - Medium
  - Proteins and Amounts to Use for Medium Porosity Hair
  - $\circ$  High
  - Proteins and Amounts to Use for High Porosity Hair
  - Hair Porosity Test
- Hair Bonds and States
  - Hair Chemistry
- Hair Growth and Hair Length
  - Hair Loss
  - Hair Breakage
  - Hair Repair
- Scalp Care
  - Scalp Imbalances
- Expert Guest: Cassandra Celestin: Hair Chemistry and Formulating Hair Care Products
  - Module 2 Wrap Up
  - Module 2 Review Quiz
  - Assignment #2

#### **MODULE 3: COSMETICS**

#### <u>Lessons</u>

- Module 3 Downloads
  - Module 3 Cosmetics Natural Hair Care Principles Mission Statement Define Hair
- Definition of a Cosmetic
  - Cosmetics
  - Drugs
  - Cosmetic Claims
- FDA Homemade Cosmetics
  - Small Businesses and Homemade Cosmetics
- MoCRA USA
  - MoCRA Modernization of Cosmetics Regulation Act of 2022
  - Key Points
- FDA Compliant Cosmetic Terminology
  - Marketing Language
  - Wording for Product Description
- Clean Beauty and Natural
  - Clean Beauty
  - Natural ISO
- Expert Guest Gay Timmons: Clean Beauty
- Green Chemistry
  - 12 Principles of Green Chemistry
  - Natural ISO
- Organic Cosmetics
  - USA Organic
  - Organic Labeling
- Vegan, Plant-Based, Cruelty-Free
  - 100% Vegan Formulations

- Cruelty-Free Certified
- Global Standards Certification
  - Natural Certification
  - NPA
  - Organic Certification
  - NOP
  - ECOCERT
  - COSMOS
  - Soil Association
  - BDIH
  - NATRUE
- Processes of Cosmetic Ingredients
  - Processes for Natural Ingredients
  - Processes for Organic Ingredients
  - Naturally Derived Ingredients
  - Nature Identical Ingredients
  - Synthetic Ingredients
  - PEG'S
  - Quats
  - Polyquats
- Expert Guest Dr. Vida Karamooz and Saied Karamooz at Blue Beautifly: Personal Care Business Sustainability Best Practices
- Natural Hair Care
  - Module 3 Wrap Up
  - Assignment #3a
  - Assignment #3b

# MODULE 4: COSMETIC INGREDIENTS - RAW MATERIALS Lessons

Module 4 Downloads

Module 4 Ingredients for Hair Aromatherapy: Essential Oils for Body, Hair, Skin eBook Ingredient Research Chart pdf Ingredient Research Chart doc Preservative - Emulsifier Guide: Ordering Cosmetic Ingredients Ingredient Brochures Silicones Environmental Impact Silicone Alternatives 1,4 Dioxane Free Surfactants

- Cosmetic Ingredients Raw Materials
  - Sourcing Cosmetic Ingredients
  - INCI Names and Trade Names
  - Classification of Cosmetic Ingredients
  - Ordering Ingredient Categories
- \* Beginner Help\* Cosmetic Ingredients
- Antioxidants
- Butters
- Chelating Agents
- Clays and Powders
- Conditioning Agents
- Emulsion Science
  - Continuous and Dispersed Phase
  - O/W Emulsion
  - W/O Emulsion
  - Skin Delivery Systems
  - Function of Emulsifiers

- Emulsifier Blends
- HLB System
- Emulsifier Application
- Emulsifiers
  - Nonionic
  - Anionic
  - Cationic
  - Liquid
  - Polysorbate Alternatives
  - Co-Emulsifier
- Essential Oils
- Fixatives Styling Agents
- Herbs, Flowers and Fruits
- Humectants
- Hydrosols
- Lipids, Esters, Alcohols
- Melting Points Oils, Butters, Waxes
- Plant Oils
- Preservatives
- Proteins
- Refatting Agents
- Silicones
- Silicone Alternatives
- Solubilizers
- Surfactant Science
  - Functions of Surfactants
  - Surfactant Molecule
  - Micelles
  - Critical Micelle Concentration
  - Types of Surfactants
  - Chemistry of Surfactant

- Surfactants
  - Anionic
  - Amphoteric
  - Nonionic
- Thickeners, Polymers, Gums, Starches
  - $\circ$  Clays
  - Natural Polymers
  - Starch Thickeners
  - Emulsifier Thickeners
  - Refatting Agent Thickeners
  - Salt Thickener
- Thickeners Waxes
  - Natural Plant Waxes
  - Emulsifier Thickeners
- Water
  - Distilled Water
  - Deionized Water
    - Module 4 Wrap Up
    - Assignment #4

# MODULE 5: INGREDIENTS METHODS

# <u>Lessons</u>

• Module 5 Downloads

#### Module 5 Ingredient Methods Aloe Vera 200x

- Ingredient Methods
  - How To Make Aloe Vera Juice 200x
  - Making a Slurry
    - Module 5 Wrap Up
    - Assignment #5

# **MODULE 6: EQUIPMENT**

#### <u>Lessons</u>

• Module 6 Downloads

Module 6 Equipment Guide: Setting Up a Small Cosmetic Lab

- Equipment
  - Equipment Overview
  - Equipment for Beginners
  - Formulating and Batch Making Equipment
  - Level 1: Beginning Kitchen Equipment for Starting
  - Level 2: Lab Equipment for Formulating
  - Level 3: Equipment for Small Batch Production
  - Level 4: Equipment for Medium to Large Batch Production
  - Stainless Steel Grades
  - Utensils
  - Thermometers
  - Beakers
  - Vessels
  - Heating Elements
  - Scales
  - $\circ$  Mixing
  - Mixers
  - Immersion Blenders
  - Overhead Stirrers
  - Homogenizers
  - Straining
  - Filling
  - Bottle Fillers
  - Testing Equipment

- pH Meters
- Induction Sealers
- Labelers
- \*Beginner Help\* Equipment
- Setting Up a Small Cosmetic Lab
  - Formulating Lab
  - Small Scale Manufacturing
  - Lab Bench
  - Storage Bin
  - Thermometers
  - Scales
  - Heating Elements
  - Vessels
  - Mixers
  - How to Use an Overhead Stirrer
  - Bladed Propeller
  - How to Use a Homogenizer
  - Dispersing Tools
  - pH meters and sticks
  - Videos showing how to use different equipment and attachments
  - Liquid Filling Machine
  - How to Set Up, Use and Clean
  - $\circ~$  Wash and Dry Area
  - Wash
  - $\circ$  Drying
- Containers
  - Containers for Hair Care Products
  - Violet Glass Containers
  - Sustainability
  - New Garbage

- Less Plastic
- Post Consumer Recycled
- Ocean Bound
- Ocean Captured Plastics
- Container Pros and Cons
- Ordering Containers
  - Module 6 Wrap-Up
  - Assignment #6

# **MODULE 7: COSMETIC FORMULATION**

# <u>Lessons</u>

- Module 7 Downloads
  - Module 7 Cosmetic Formulation Blank Formula Worksheet pdf Blank Formula Worksheet doc Lab Notebook Template doc Product Development Brief pdf Product Development Brief doc Product Feedback Questionnaire pdf Product Feedback Questionnaire doc Product Pricing COGs pdf Product Pricing COGs doc Celsius to Fahrenheit Conversion Guide: Completing A Successful Formulation
- Formulating Cosmetics: Building the Formula
  - Reading a Cosmetic Formula
  - Building the Formula
  - The Math Calculating the Formula
- Formulating Cosmetics: Making the Formulation
  - Formulating
  - Product Development and Benchmark
  - Creating a Synergy

- Formula
- Make a Slurry
- $\circ$  Viscosity
- Condensation/Evaporation
- Pre-Made Solutions
- Phases
- Adjusting the Formula
- Lab Notebook
- Weighing
- \*Beginner Help" Weighing Ingredients
- Weighing Essential Oils
- pH Testing and Adjusting
  - pH Testing for Hair and Skin Care Products
  - pH for Skin Care Products
  - pH for Hair Care Products
  - Testing the pH
  - pH Strips
  - pH Meter
  - Storing the pH meter
  - Adjusting the pH
  - Lowering pH
  - Raising pH
  - Buffering Solutions
  - Calibrating a pH meter
- Preserving Cosmetics
  - Safe Cosmetics
  - Preservative Restrictions in Countries
  - Preserving Anhydrous Formulations
  - Building a Preservative System
  - Self-Preserving Ingredients
  - Broad Spectrum Preservatives

- Antimicrobials
- Choosing the Best Preservative
- Expert Guest: Green Cosmetic Preservation with Barbara Olioso
- Products for Hair Care
- Evaluating Hair Care Products
- Labeling INCI Allergens
  - Product Label
  - Ingredient Declaration
  - INCI
  - Trade Name
  - Allergens Listing
  - Bar Codes
- Pricing Products
  - Sustainable Product Pricing
  - Pricing Strategies
  - Cost Plus Pricing
  - Calculating Cost of Goods
  - Gross Profit Margin
  - Markup
  - Calculating Cost of Goods
  - Product Pricing Example
- Product Development
- Expert Guest Jill Munson from Wildling: Product Development
- Expert Guest Donna Maria CEO Indie Business Network
  - Module 7 Wrap-Up
  - Assignment #7

#### **MODULE 8: GMP AND TESTING**

#### <u>Lessons</u>

- Module 8 Downloads
  - Module 8 GMP and Testing Raw Material Lot Number Log pdf Raw Material Lot Number Log doc Batch Record Template pdf Batch Record Template doc Quality Control Log Microbial Kit Testing Log Microbial Lab Testing Log DIY Microbial Test Kit Instructions DIY Test Kit Brochure Cleaning and Sanitization in Manufacturing Cosmetics Guide: GMP SOP Cosmetic Testing
- GMP and SOPs
  - Manufacturing
  - Sanitizing
  - Record Keeping
  - Standard Operating Procedures (SOP's)
  - Batch Number
  - Batch Record Log
- Pre-Market Testing, Stability and Microbial Testing
  - Stability Testing
  - Real-Time
  - Accelerated
  - DIY Accelerated Stability Testing
  - Microbial Testing
  - Challenge Testing

- Batch Testing
- Incubator Testing
- DIY Testing Kits
- Expert Guest Megan Rutland: Microbiological Testing for Cosmetics
  - Module 8 Wrap-Up
  - Module 8 Review Quiz
  - Assignment #8

# **MODULE 9: SHAMPOO**

# <u>Lessons</u>

Module 9 Downloads

Module 9 Shampoo Guide: Build + Create Custom Shampoo Beginning Equipment for Shampoo Shampoo Build Chart Hair Additives Chart For Customizing Shampoo Scalp Additives Chart for Customizing Scalp Formulations Shampoo Build Worksheet

- Shampoo
  - Function of Shampoo
  - Natural Shampoo
  - Consumer Expectations
- Formulating Shampoo
  - Function of Shampoo
  - Formulation Needs to Address
  - Categories of Shampoo
  - Thickening Shampoos
  - Surfactants
  - Substitutions
  - o pH
  - Hard Water
  - Shampoo YES and NO

- Tips on Making Shampoo
- Shear
- Grades of Xanthan Gum
- Scenting Shampoo
- Shampoo Build
  - Shampoo Formulation Build
  - Non-Sulfate Shampoo Base Formula
  - Sulfate Shampoo Base Formula (for students with access only to SLES and SLS)
- Calculating Surfactant Active Content
- Custom Shampoo Formula Build
- Hair Additives for Shampoo
- Scalp Additives
  - Exfoliating
  - Hair Growth
  - Soothing/Nourishing
- \*Beginner Help\* Shampoo
- Shampoo Base Formulations

Downloads: Shampoo System #1 Formula and Procedure

Shampoo System #2 Formula and Procedure Shampoo System #1 GO Formula and Procedure Shampoo System #2 GO Formula and Procedure Shampoo System #1 SC Formula and Procedure Shampoo System #2 SC Formula and Procedure

- Shampoo System #1
- Shampoo System #2
- Plant Keratin Shampoo

Downloads: Plant Keratin Shampoo System #1 Formula and Procedure Plant Keratin Shampoo System #2 Formula and Procedure Plant Keratin Shampoo System #1 GO Formula and Procedure Plant Keratin Shampoo System #2 GO Formula and Procedure

- Volumizing Shampoo
  - Downloads: Volumizing Shampoo System #1 Formula and Procedure Volumizing Shampoo System #2 Formula and Procedure Volumizing Shampoo System #1 GO Formula and Procedure Volumizing Shampoo System #2 GO Formula and Procedure
- Hydrating Shampoo
  - Downloads: Hydrating Shampoo System #1 Formula and Procedure Hydrating Shampoo System #2 Formula and Procedure Hydrating Shampoo System #1 GO Formula and Procedure Hydrating Shampoo System #2 GO Formula and Procedure
- Clarifying Shampoo
  Downloads: Clarifying Shampoo System #1 Formula and Procedure
  Clarifying Shampoo System #2 Formula and Procedure
  Clarifying Shampoo System #1 GO Formula and Procedure
  Clarifying Shampoo System #2 GO Formula and Procedure
- Formulating Baby Shampoo
- Baby Shampoo Build
- Baby Shampoo

Downloads: Baby Shampoo System #1 Formula and Procedure Baby Shampoo System #2 Formula and Procedure Baby Shampoo System #1 GO Formula and Procedure Baby Shampoo System #2 GO Formula and Procedure

• Expert Guest: Waterless and Low-Water Formulations with Dennis Abbeduto

Downloads: The Formulators Lab Waterless and Low Water Formulation

- Module 9 Wrap-Up
- Module 9 Review Quiz
- Assignment #9

# MODULE 10: HAIR CONDITIONER AND HAIR MASK

#### <u>Lessons</u>

• Module 10 Downloads

Module 10 Conditioner and Mask Conditioner Build Chart Hair Additives for Customizing Conditioner Conditioner Build Worksheet

- Hair Conditioner
  - Function of Hair Conditioner
  - Natural Conditioner
  - Consumer Expectations
- Formulating Hair Conditioner
  - Formulation Needs to Address
  - Categories of Conditioners
  - Leave-In Conditioners
  - Tips on Making Conditioner
  - ∘ pH
  - Hard Water
  - Hair Repair Proteins
- Hair Conditioner Build
- Custom Conditioner Build
- Additives for Conditioner
- Conditioner Base Formulations

#### Downloads: Conditioner System #1 Formula and Procedure

#### Conditioner System #2 Formula and Procedure

- Conditioner System #1
- Conditioner System #2
- Plant Keratin Conditioner

#### Downloads: Plant Keratin Conditioner System #1 Formula and Procedure Plant Keratin Conditioner System #2 Formula and Procedure

• Volumizing Conditioner

Downloads: Volumizing Conditioner System #1 Formula and Procedure Volumizing Conditioner System #2 Formula and Procedure

• Hydrating Conditioner

Downloads: Hydrating Conditioner System #1 Formula and Procedure Hydrating Conditioner System #2 Formula and Procedure

- Deep Conditioner Build
  - Deep Conditioner Formula Build
  - Deep Conditioner Example
  - Conditioning Curl Cream
- Deep Conditioner

#### Downloads: Deep Conditioner System #1 Formula and Procedure Deep Conditioner System #2 Formula and Procedure

• Leave-In Conditioner Base

#### Downloads: Leave-In System #1 Formula and Procedure Leave-In System #2 Formula and Procedure

- Formulating Curl Cream Styling Curl Cream Build
  - Curl Cream Function
  - Conditioning Curl Cream
  - Styling Curl Cream
  - Ingredients to Include
- Curl Cream Build
- Curl Cream Defining Styling Cream

Downloads: Curl Cream - Defining Styling Cream Formula and Procedure Curl Cream - Defining Styling Cream (with thickener) Formula

#### and Procedure

- Formulating Hair Mask
  - Fresh Hair Mask
  - Formulating Hair Mask
  - Dry Fruit Powder Mask
  - Cream (Emulsion) Hair Mask
  - How to Use a Hair Mask

- Hair Mask Cream Build
- Hydrating, Repairing, Strengthening Treatment Mask Downloads: Hydrating, Repairing Treatment Mask Formula and Procedure
- Sea Moss Mask
  Downloads: Sea Moss Mask Formula and Procedure
- Expert Guest
  - Module 10 Wrap-Up
  - Module 10 Review Quiz
  - Assignment #10

# MODULE 11: HAIR MIST, GEL & SERUM

# <u>Lessons</u>

- Module 11 Downloads
  Downloads: Module 11 Hair Mist, Gel, Serum Hydrating Mist Build Worksheet
- Hair Mist
- Hydrating Mist Build
- Hydrating Mist
- Hair Mist Build
- Hydrating Mist Base Formulation
  - Downloads: Hydrating Mist Formula and Procedure
- Refresher Spray Build
- Refresher Spray
  - Downloads: Refresher Spray Formula and Procedure
- Hair Gel
- Styling Gel Build
- Styling Gel
  - Downloads: Styling Gel Formula and Procedure
- Firmer Hold Gel Loc and Retwist
  - Downloads: Firmer Hold Gel Formula and Procedure
- Edge Gel

Downloads: Edge Control Gel Formula and Procedure

• Edge Control (Traditional)

Downloads: Edge Control (Traditional) Formula and Procedure

- Hair Serum
  - Function of Hair Serum
  - How to Use Hair Serum
- Serum Build
  - Silicone Alternative Build
  - Aqueous Serum Build
- Smoothing Serum

#### Downloads: Smoothing Serum Formula and Procedure

- Fortifying Hair and Scalp Serum
  - Downloads: Fortifying Hair and Scalp Serum Formula and Procedure
- Hair Rinse Treatment
- Rice Water Hair Rinse Treatment
  Downloads: Rice Water Hair Rinse Formula and Procedure
- Botanical ACV Concentrate Hair Rinse Treatment
  Downloads: Botanical ACV Concentrate Hair Rinse Formula and Procedure
- Royal Crown Hair Rinse Treatment

Downloads: Royal Crown Hair Rinse Formula and Procedure

- Module 11 Wrap-Up
- Module 11 Review Quiz
- Assignment #11

# MODULE 12: HAIR OIL, BEARD OIL, HAIR BUTTER, POMADE Lessons

• Module 12 Downloads

Module 12 Hair Oil, Beard Oil, Hair Butter, Pomade Hair Oil and Pomade Research

- Hair Oil
  - Function of Hair Oil
  - General Usage
  - Styling Hair Oil
  - Treatment Hair Oil
  - Dry Hair Treatment
  - Hair Thinning Treatment
  - Irritated and Flaking Scalp Treatment
- Formulating Hair Oil
  - Formulating Hair Oil
  - Plant Oils for Hair Types
- Hair Oil Build
  - Hair Oil Build (Anhydrous)
  - Silicone Alternative Hair Oil Build (Anhydrous)
- Nourishing Hair Oil
  - Downloads: Nourishing Hair Oil Formula and Procedure
- Hair Growth Drops
  - Downloads: Hair Growth Drops Formula and Procedure
    - Prevention of Hair Loss and Hair Growth
    - Plant Oils for Hair Growth
- Herbal Hair Growth Oil

#### Downloads: Herbal Hair Growth Oil Formula and Procedure

- 5 Best Ingredients for Hair Loss and Hair Length
- Hair Growth Herbs in Herbal Hair Growth Oil
- Hair Growth Herbs
- Scalp Soother

#### Downloads: Scalp Soother Formula and Procedure

• Beard Oil

Downloads: Beard Oil Formula and Procedure

- Beard
- Beard Care

- Formulating Beard Oil
- Beard Oil
- Hair Butter
- Formulating Hair Butter
- Hair Butter Build
- Hair Styling Butter

#### Downloads: Hair Styling Butter Formula and Procedure

- Pomade
- Formulating Pomade
- Pomade Build
- Hair Pomade

#### Downloads: Hair Pomade Formula and Procedure

Module 12 Wrap-Up

- Module 12 Review Quiz
- Assignment #12

#### **MODULE 13: SCENTING FORMULATIONS**

#### <u>Lessons</u>

- Module 13 Downloads
  Downloads: Module 13 Scenting Formulations Scent Likes
- Formulating Scent Blends
- Quick Tips Essential Oil Blending
- Essential Oil Blends for Hair
- Natural Scent Blends

# **MODULE 14: HERBAL EXTRACTS**

#### <u>Lessons</u>

Module 14 Downloads
 Downloads: Module 14 Herbal Extracts
 How to Make 47 Herbal Extracts eBook
 Calendula Flower Oil eBook

Homemade Rosewater eBook Lavender Varieties eBook How to Make Homemade Hydrosols eBook Flower Herb Research Herbalist Michael Moore Herbal Info

- Herbal Extracts
  - Herbal Extracts
  - Formulating with Extracts
  - Making Extracts
  - Filtering Extracts
  - General Guideline for Making Extracts
  - Terms to Know
- Herbs for Hair Care
- Herbal Water/Tea Infusions
- Herbal Vinegar
- Herbal Alcohol Extract
- Herbal Glycerin Extract
- Herbal Oil Extract
  - Module 14 Wrap-Up
  - Module 14 Review Quiz
  - Assignment #14

#### FINAL

- Final Information
  - Final Exam
  - Your Diploma Certificate
  - Proud Graduate Badge
  - Joan Morais Cosmetics School Lifelong Community
  - How to Get Questions Answered
  - Joan's Tips for Success

# FINAL EXAM QUIZ

RECEIVE YOUR DIPLOMA CERTIFICATION UPON COMPLETION (course requirements must be met to receive the diploma certification, including passing the final exam)