### JOAN MORAIS

COSMETICS SCHOOL

# Professional Natural Hair Care Formulation Diploma Course Curriculum

#### **WELCOME**

**Lifetime Course Access** 

14 Modules / 203 Lessons /58 Formulations

**Approximate Study Time: 160 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

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**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**

#### Lessons

Module 1 Downloads

Pro Hair Course Training Manual Cover Module 1 Hair Hair Thoughts

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

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

#### **MODULE 2: THE SCIENCE OF HAIR**

#### Lessons

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
  - Wavy
  - o Curly
  - o Coily
- Hair Texture
  - Fine
  - Medium
  - Thick (Course)
- Expert Guest: Aminah Lawson: Natural Textured Hair
- Hair Typing Systems
- Hair Types
  - o 1A, 1B, 1C
  - o 2A, 2B, 2C
  - o 3A, 3B, 3C

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- o 4A, 4B, 4C
- Hair Density
  - Low
  - Medium
  - High
- Hair Porosity
  - Low
  - Proteins and Amounts to Use for Low Porosity Hair
  - Medium
  - o Proteins and Amounts to Use for Medium Porosity Hair
  - o 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
  - o Hair Breakage
  - o 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**

#### **Lessons**

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
- 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
  - o Organic Labeling
- Vegan, Plant-Based, Cruelty-Free
  - 100% Vegan Formulations
  - o Cruelty-Free Certified
- Global Standards Certification
  - Natural Certification

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- NPA
- Organic Certification
- NOP
- ECOCERT
- COSMOS
- Soil Association
- o BDIH
- NATRUE
- Processes of Cosmetic Ingredients
  - Processes for Natural Ingredients
  - Processes for Organic Ingredients
  - Naturally Derived Ingredients
  - Nature Identical Ingredients
  - Synthetic Ingredients
  - o 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

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- Emulsifier Application
- Emulsifiers
  - Nonionic
  - Anionic
  - Cationic
  - o 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

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- o Amphoteric
- Nonionic
- Thickeners, Polymers, Gums, Starches
  - 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**

#### Lessons

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

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#### **MODULE 6: EQUIPMENT**

#### Lessons

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
  - Mixing
  - Mixers
  - Immersion Blenders
  - Overhead Stirrers
  - Homogenizers
  - Straining
  - Filling
  - Bottle Fillers
  - Testing Equipment
  - o pH Meters
  - Induction Sealers

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- 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
  - o pH meters and sticks
  - Videos showing how to use different equipment and attachments
  - Liquid Filling Machine
  - o How to Set Up, Use and Clean
  - Wash and Dry Area
  - Wash
  - o Drying

#### Containers

- Containers for Hair Care Products
- Violet Glass Containers
- Sustainability
- New Garbage
- Less Plastic
- Post Consumer Recycled

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- Ocean Bound
- Ocean Captured Plastics
- Container Pros and Cons
- Ordering Containers
  - Module 6 Wrap-Up
  - Assignment #6

### MODULE 7: COSMETIC FORMULATION Lessons

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

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- 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
  - o pH for Hair Care Products
  - Testing the pH
  - pH Strips
  - o 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
  - o Self-Preserving Ingredients
  - Broad Spectrum Preservatives
  - Antimicrobials
  - Choosing the Best Preservative

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- Expert Guest: Green Cosmetic Preservation with Barbara Olioso
- Products for Hair Care
- Evaluating Hair Care Products
- Labeling INCI
  - Product Label
  - Ingredient Declaration
  - o INCI
  - Trade Name
  - 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**

#### Lessons

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

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

#### **MODULE 9: SHAMPOO**

#### **Lessons**

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
  - o Function of Shampoo
  - Formulation Needs to Address
  - Categories of Shampoo
  - Thickening Shampoos
  - Surfactants
  - Substitutions
  - ∘ pH
  - Hard Water
  - Shampoo YES and NO
  - Tips on Making Shampoo
  - Shear

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- 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

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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

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 Lessons

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

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- Consumer Expectations
- Formulating Hair Conditioner
  - Formulation Needs to Address
  - Categories of Conditioners
  - Leave-In Conditioners
  - o Tips on Making Conditioner
  - o 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

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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
  - o 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 Lessons

Module 11 Downloads

Downloads: Module 11 Hair Mist, Gel, Serum Hydrating Mist Build Worksheet

- Hair Mist
- Hydrating Mist Build
- Hydrating Mist

**Downloads: Hydrating Mist Formula and Procedure** 

- 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

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

**Downloads: Smoothing Serum Formula and Procedure** 

Hair and Scalp Serum

**Downloads: Hair and Scalp Serum 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
  - o 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)

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- 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** 

- o 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
- o 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** 

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- Module 12 Wrap-Up
- Module 12 Review Quiz
- Assignment #12

# MODULE 13: SCENTING FORMULATIONS Lessons

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

#### Lessons

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

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- 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)