



# Aesthetic Fundamentals and Laser Safety Officer Course (M174)

## **OVERVIEW**

This comprehensive 32-hour course has been developed for the clinician responsible for aesthetic practices as well as the laser safety officer duties in a medical/aesthetic environment.

The curriculum has been developed in accordance with the ANSI Z136.3-2011 standard, for Safe Use of Lasers in Healthcare.

This course is designed to introduce the fundamental concepts of laser/light science, as applied to the technology and safety. This is required of professionals working with and responsible for, Class 3b and Class 4 medical lasers in the cosmetic/aesthetic field. First Aid, CPR and AED certification will be provided as part of the course curriculum.

The American National Standard (ANSI Z136), FDA, OSHA, IEC standards, as well as state mandate, professional societies and other appropriate regulations, will be used as the basis for both risk assessment and the development of relevant control measures.

Through lectures and discussion, participants will obtain clinical, technical and administrative information essential to the development of a comprehensive, compliant, and effective aesthetic program. A credentialing aesthetic examination will be given at the conclusion of the lectures, along with group and oral presentations.

### **Course Topics:**

- Discuss the fundamental science of laser/light/ RF energy as it pertains to device biophysics and tissue effects.
- Determine hazards associated with laser/light/ RF systems and appropriate safety control measures required.
- Identifying the regulatory and advisory guidelines for development of an aesthetic safety program.
- Discuss clinical applications of current and emerging laser/light/ RF technology in the aesthetic field.
- Identify key component of an aesthetic consultation with review of client assessment, informed consents and client assessment.

## **OBJECTIVES**

At the conclusion of the seminar, participants will be able to:

1. Discuss the fundamental concepts of laser science, biophysics, and tissue effects of lasers.
2. Determine hazards associated with healthcare laser systems, and appropriate control measures required.
3. Identify the regulatory and advisory guidelines for development of a laser safety program.
4. Discuss clinical applications of current and emerging laser and Light technology.



# Aesthetic Fundamentals and Laser Safety Officer Day 1

0730 – 0800	Welcome and Registration
0800 – 1000	<b>Laser Science and Systems</b> How Laser Light Is Generated / Characteristics Tissue Interactions Parameters and Dosimetry Fluence, Power Density, and Dosimetry
1000 – 1015	Break
1015 - 1200	<b>Laser Science and Systems (Continued)</b>
1200 - 1300	Lunch
1300 - 1500	<b>Laser Safety: Beyond Signs and Goggles</b> Classifications of Lasers – MPE, NHZ Laser Safety Officer Administrative Controls Engineering Controls
1500- 1515	Break
1515 – 1600	<b>Laser Safety: Beyond Signs and Goggles (Continued)</b>
1600- 1700	<b>Physics Quiz</b>



# Aesthetic Fundamentals and Laser Safety Officer Day 2

0800 – 1000

## **Procedural Controls**

- Policies and Procedures
- Competency Based Staff Education
- Quality Assurance and Office Audits
- Incident / Accident Reporting
- Medical Surveillance
- Pt Management and Risk Assessment
- Documentation

1000 - 1015

Break

1015 - 1200

## **Demystifying Federal/ State Regulations**

ANSI, JCAHO, FDA, IEC, ASLMS

1200 – 1300

Lunch

1300 - 1430

## **Texas Mandate**

1430 - 1530

## **Development of a Safety Audit**

1530 545

Break

1545 - 1700

## **It is Only Skin Deep – Anatomy of the Skin**

### **Patient Consultations- The Art and Science**

- Skin Assessment and Classification
- Office Consultation
- Patient Education
- Anesthetics



## **Aesthetic Fundamentals and Laser Safety Officer Day 3**

0800 – 0900	<b>Patient Consultation Cont</b>
0900 - 0930	<b>Pre and Post Treatment Protocol</b> <ul style="list-style-type: none"><li>-Indications and Contraindications</li><li>- Adverse Effects Management</li></ul>
0930 - 0945	Break
0945 - 1045	<b>Vascular, Pigmented Lesions Devices and Leg Vein Therapy</b> <ul style="list-style-type: none"><li>-Selective Photothermolysis</li><li>-Patient Selection</li><li>-Treatment, Pre and Post Care</li><li>-Devices</li></ul>
1045 – 1200	<b>Permanent Laser Hair Reduction Devices</b> <ul style="list-style-type: none"><li>-Indications</li><li>-Patient Selection</li><li>-Treatment, Pre and Post Care</li><li>-Devices</li></ul>
1200 – 1300	Lunch
1300- 1400	<b>Group Scenarios – Patient Treatment Plan</b>
1400 - 1500	<b>Laser Tattoo Removal</b> <ul style="list-style-type: none"><li>-Indications</li><li>-Patient Selection</li><li>-Treatment, Pre and Post Care</li><li>-Devices</li></ul>
1500 - 1600	<b>Acne Treatment Devices</b> <ul style="list-style-type: none"><li>-Indications</li><li>-Patient Selection</li><li>-Treatment, Pre and Post Care</li><li>-Devices</li></ul>
1600 – 1700	<b>Mock Quiz</b>



## Aesthetic Fundamentals and Laser Safety Officer Day 4

0800 – 0930	<b>Facial Rejuvenation</b> -Indications -Devices -Level 1 -2
0930 - 0945	Break
0945 - 1100	<b>Facial Rejuvenation</b> -Indications -Devices -Level 1 -2
1100 – 1200	<b>Facial Rejuvenation</b> -Indications -Devices -Level 3
1200 - 1300	Lunch
1300 – 1400	<b>Group Scenarios – Patient Treatment Plan</b>
1400 – 1500	<b>Body Rejuvenation</b> -Body Contouring -Indications -Devices
1500 – 1700	<b>Final Credentialing Examination</b>