Dr. Suliman's Alshalhoub Local anesthesia review course by Prof. Hesham Almoallim

It is a one-day course which can be tailored according to. The course has the following objectives:

At the end of the course the participant should be able to describe the following:

1- The cranial nerves functions and examination.
2- Detailed applied anatomy of the Trigeminal nerve.
3- The concept of pain generation and transmission.
4- Different aesthetic techniques.
5- Special considerations in local anesthesia
6- How to deal with common emergencies at the dental clinic

The course is composed of 10 interactive lectures as follow

1- Cranial nerves overview
    a. List of the 12 cranial nerves
    b. Brief description of the function
    c. Examination (videos)
2- Applied anatomy of the Trigeminal nerve
    a. Detailed anatomy of the three divisions by drawn diagrams
    b. Ganglia related to the nerve
3- Neurophysiology of pain pathways and theories
    a. Pain mediators and their function
    b. Nerve fibres and their properties
    c. Pain pathways
    d. Pain theories
4- Fundamentals of impulse generation and transmission
    a. Factors affecting the movement of ions across the cell membrane
    b. Action potential
    c. Mechanism of action of local anesthetics
5- Pharmacology of local anesthetics
    a. Chemical structure
    b. Types
    c. Physiochemical properties
    d. Examples
6- Pharmacology of vasoconstrictors in local anesthetics
    a. Rationale of adding vasoconstrictor
    b. Properties of main vasoconstrictors
    c. Calculation of the doses
7- Techniques of maxillary anaesthesia
    a. Infiltration
    b. PSA nerve block
    c. MSA nerve block

d. ASA nerve block (infraorbital nerve block)
e. Greater palatine nerve block
f. Nasopalatine nerve block
g. Maxillary nerve block

8- Techniques of mandibular anesthesia
a. IAN block
b. Mental nerve block
c. Buccal nerve block
d. Gow Gates Technique
e. Vazarani Akinosi Technique

9- Special considerations in local anesthesia
a. Needle deflection
b. Concentration and doses
c. Revering the LA action
d. Neurotoxicity from LA
e. New trends in LA
f. Nanotechnology applications

10- Management of emergeices in dental clinic
a. Addressing common ER conditions
b. Basic management
c. Emergency drugs