

ITEC Level 4 Unit 48 Laser and Intense Pulsed Light Treatments	
Recommended guided learning hours – 200	
Unit 48 Laser and Intense Pulsed Light Treatments Theory	
Learning outcome	Underpinning knowledge
1. Understand and explain the structure of an atom	To include: • Protons • Neutrons • Electrons • Nucleus • Functions of the above
2. Understand and explain the measurement of electricity	To include: • Volts • Watts and Amperes • Ohms and Ohm's law and their relevance
3. Understand and explain how to work out the correct fuse	• 3 amp fuses with an appliance of up to 700 watts • 5 amp fuses with an appliance between 750-1000 watts • 13 amp fuses for appliances between 1000-3000 watts
4. Understand and explain the different types of current used in beauty therapy and the possible high risk involved	To include: • Direct • Alternating
5. Understand and explain the function of a transformer and when and why it may be used	To include: • Step up and step down
6. Understand and explain the main types of laser and their effects and uses	To include: • Argon laser • Ruby laser • Carbon dioxide laser • Helium neon laser • Diode • Nd: Yag
7. Understand and explain the function of a rectifier	• Current flows in one direction only
8. Understand and explain the correct wiring of a plug	To include: • The colours of the wires and their position inside the plug • Green/yellow to the centre • Blue to the left • Brown to the right
9. Understand and explain light as Electromagnetic Radiation (EMR)	To include: • The spectrum of electromagnetic radiation • The types of light used by Lasers and Intense pulsed light • The wavelengths and depth of penetration • Photons • Joules • Pulse repetition rate • Pulse duration • Fluence • The size of the treatment beam (spot size)
10. Understand and explain the inverse square law	To include: • The relationship between distance, time and the distance of the light from the client
11. Understand and explain the types of light emitted from IPL and laser systems	To include: • Polychromatic • Monochromatic • Non-coherent • Coherent • Defocused light • Parallel light • Similarities and differences between them
12. Understand and explain light-tissue interaction and the effects on the skin and eyes	To include: • Reflection • Transmission • Scattering • Absorption • Selective photothermolysis • Haemoglobin and Oxyhaemoglobin • Thermal relaxation time (TRT)
13. Understand and explain skin cooling methods, effects, advantages and disadvantages	To include: • Water cooled • Cryogen sprays • Cold gels
14. Understand and explain their responsibility under the Health and Safety at Work Act	To include: • Safety precautions in the salon when dealing with the general public and their liability
15. Understand and explain the Electricity at Work Act 1992	To include: • The therapist's responsibilities to the client • Care and maintenance of equipment
16. Understand and explain the Care Standards Act 2000	To include: • Safety requirements • Goggles should be worn by both the therapist and the client

	<ul style="list-style-type: none"> • Controlled area • Appropriate environment • Certificate of Registration • Only establishments that have successfully registered and display their Certificate of Registration can offer laser and IPL treatment
17. Understand and explain the first aid procedure for the following conditions: Electric shock and burns	<ul style="list-style-type: none"> • Check the up to date procedures with St Johns/Andrews ambulance and the Red Cross
18. Understand and explain the reasons and procedure for a tactile safety test	<p>To include:</p> <ul style="list-style-type: none"> ◆ The procedure for the test • Taking a sharp end of a wooden stick and a piece of cotton and placing them alternately against the skin • Ask the client if they can tell the difference between the sharp and soft sensation
19. Understand and explain the reasons and procedure for a thermal safety test	<p>To include:</p> <ul style="list-style-type: none"> ◆ The procedure for the test: • Take a hot and cold test tube full of water and place alternately against the client's skin to ascertain whether they feel the burning sensation of heat
20. Understand and explain the reasons and procedure for a patch test	<p>To include:</p> <ul style="list-style-type: none"> ◆ The procedure for the test: • Apply a small number of pulses to an area with similar hair and skin to the treatment site • Record settings • Wait for skin response, i.e. 24 - 72 hours depending on the skin type • Recognise adverse reactions
21. Understand and explain those contraindications to Laser and IPL treatments requiring medical referral or the client to indemnify their condition in writing prior to the treatment and those contraindications that restrict treatment	<ul style="list-style-type: none"> ◆ Contraindications requiring medical referral or the client to indemnify their condition in writing prior to treatment <ul style="list-style-type: none"> • Any condition already being treated by a GP, dermatologist or another skin therapist • Medical oedema • Osteoporosis • Arthritis • Nervous/Psychotic conditions • Recent operations • Diabetes • Asthma • Bells Palsy • Trapped/Pinched nerve • Inflamed nerve • Acute rheumatism ◆ Contraindications that restrict treatment <ul style="list-style-type: none"> • Fever • Contagious or infectious diseases • Under the influence of drugs or alcohol • Cancer • Pregnancy • Drugs or medications that cause photo-sensitisation or skin thinning effects • Herbal remedies that cause photo-sensitisation • Allergies to the products or materials used • Epilepsy • Cardio-vascular conditions (thrombosis, phlebitis, hypertension, hypotension, heart conditions) • Connective tissue disorders (scleroderma) • Herpes • Skin diseases • Undiagnosed lumps and bumps • Cuts • Bruises • Abrasions • Sunburn • Suntanned skin • Artificial tan until the product has faded from the skin • Areas of undiagnosed pain • Skin pigment conditions (vitiligo, melasma moles and pigmented naevi) • Keloid scars • Any metal pins or plates • Loss of skin sensitivity (test with tactile and thermal methods)
22. Understand and explain the importance of taking photographs of the treatment area for your client records and treatment plan	<p>To include:</p> <ul style="list-style-type: none"> • Normal and close up photographs • Progression of treatment • Condition of area to be treated • Skin reactions • Effectiveness of treatment
23. Understand and explain the importance of test shots and how to recognise skin reactions	<p>To include:</p> <ul style="list-style-type: none"> • Determining the correct treatment parameters • Perifollicular erythema • Perifollicular oedema
24. Understand and explain storage of client photographs and records	<p>To include:</p> <ul style="list-style-type: none"> • Secure storage • Length of time records/photographs should be kept (eight years depending upon the age of the

	client when treatment finishes)
Structure of the Skin	
25. Understand and explain (with the aid of a diagram) the position and function of the following:	<ul style="list-style-type: none"> ◆ Epidermis <ul style="list-style-type: none"> • Stratum corneum • Stratum lucidum • Stratum granulosum • Stratum spinosum/malpighian • Stratum germinativum/basal layer ◆ Dermis <ul style="list-style-type: none"> • Blood supply • Lymphatic supply • Hair follicle • Hair • Sebaceous gland • Sweat gland: Eccrine and Apocrine • Sensory nerve endings • Arrector pili muscle • Dermal papilla • Collagen • Elastin • Histiocytes • Mast Cells • Fibroblasts
26. Understand and explain subcutaneous/adipose layer	• The structure and function of the fatty layer underneath the Dermis
27. Understand and explain Melanocytes	• Describe where they are found and their function
Functions of the Skin	
28. Understand and explain the functions of the skin	<ul style="list-style-type: none"> • Secretion • Heat regulation • Absorption • Protection/Acid Mantle (composition and formation) • Elimination/excretion • Sensation • Vitamin D formation (ergosterol)
29. Understand and explain the functions and formation of the acid mantle	To include: <ul style="list-style-type: none"> • Composition and formation
30. Understand, explain and recognise the different skin types and Fitzpatrick skin typing	To include: <ul style="list-style-type: none"> • White • Black • Asian • Mixed • Chinese • Dry • Oily • Combination • Mature • Young • Fitzpatrick scale 1 – 6
31. Understand, explain and recognise the different skin conditions	To include: <ul style="list-style-type: none"> • Sensitive • Milia • Comedones • Dehydrated • Broken capillaries • Pustules • Papules • Open pores • Hyperpigmentation • Dermatitis papulosa nigra • Pseudo folliculitis • Keloid • In growing hairs
32. Understand and explain contraindications and why they should not be treated	To include: <ul style="list-style-type: none"> • Eczema • Psoriasis • Dermatitis • Severe acne • Urticaria • Sunburn • Suntanned skin • Allergic reaction • Warts • Impetigo • Herpes Simplex • Tinea • Keloid scars
33. Understand, explain and recognise the following skin diseases and disorders:	<ul style="list-style-type: none"> ◆ Infestations <ul style="list-style-type: none"> • Scabies • Lice ◆ Congenital <ul style="list-style-type: none"> • Eczema • Psoriasis • Dermatitis ◆ Bacterial <ul style="list-style-type: none"> • Acne vulgaris • Impetigo • Acne rosacea • Boils • Folliculitis ◆ Viral <ul style="list-style-type: none"> • Warts • Herpes simplex • Herpes zoster ◆ Fungal <ul style="list-style-type: none"> • Tinea (ringworm) ◆ Pigmentation disorders <ul style="list-style-type: none"> • Vitiligo • Albinism • Chloasma • Ephelides • Lentigo • Moles (papilloma) • Naevi • Port wine stain • Leucoderma ◆ General disorders <ul style="list-style-type: none"> • UV damage • Urticaria • Allergic reaction
34. Understand, explain and recognise the main skin cancers and all possible causes	<ul style="list-style-type: none"> • Basal Cell Carcinoma • Squamous Cell Carcinoma • Malignant Melanoma
Structure and Functions of the Hair	
35. Understand and explain types of hair	• Lanugo • Vellus • Terminal
36. Understand and explain (with the aid of diagrams) the position and function of the following:	<ul style="list-style-type: none"> • Cuticle • Cortex • Medulla • Inner Root Sheath • Huxley's Layer • Henley's Layer • Outer Root Sheath • Vitreous Membrane • Connective Tissue • Dermal Papilla
37. Understand and explain the factors which affect hair growth	To include: <ul style="list-style-type: none"> • Congenital • Topical • Drugs/medication • Systemic

	<ul style="list-style-type: none"> • Stress • Anorexia • Polycystic ovaries • Hirsutism
38. Understand and explain at which stage of the growth cycle laser and intense pulsed light treatment will be most successful	To include: <ul style="list-style-type: none"> • Anagen • Richard-Meharg Hair Growth Table
39. Understand and explain what type of hair/skin combination has the best result	<ul style="list-style-type: none"> • Dark hair/light skin
40. Understand and explain other hair removal methods	To include: <ul style="list-style-type: none"> • Shaving • Plucking • Waxing • Depilatory creams • Electrolysis (shortwave and blend)
Endocrine system	
41. Understand and explain (with the aid of diagrams) the position of the main endocrine glands, hormones secreted and effects of hyper/hyposecretion of those hormones	<ul style="list-style-type: none"> ♦ Pituitary <ul style="list-style-type: none"> • Oxytocin • Antidiuretic hormone (ADH) (Vasopressin) • Prolactin • Human Growth Hormone (HGH) • Thyroid Stimulating Hormone (TSH) • Adrenocorticotrophic Hormone (ACTH) • Luteinising Hormone (LH) • Follicle Stimulating Hormone (FSH) • Melanin Stimulating Hormone (MSH) ♦ Thyroid gland <ul style="list-style-type: none"> • Thyroxine • Triiodothyronine • Calcitonin ♦ Parathyroid glands <ul style="list-style-type: none"> • Parathormone ♦ Thymus <ul style="list-style-type: none"> • T lymphocytes ♦ Pineal <ul style="list-style-type: none"> • Regulates the pituitary and releases serotonin ♦ Islets of Langerhans <ul style="list-style-type: none"> • Insulin ♦ Adrenal glands <ul style="list-style-type: none"> Adrenal medulla: • Adrenalin • Noradrenalin Adrenal cortex: • Corticosteroids • Mineralcorticoids – Aldosterone • Glucocorticoids ♦ Ovaries <ul style="list-style-type: none"> • Oestrogen • Progesterone ♦ Testes <ul style="list-style-type: none"> • Testosterone
42. Understand and explain the effects of hormones on the skin and hair growth cycle	To include: <ul style="list-style-type: none"> • Puberty • Pregnancy • Menopause
43. Understand and explain the effect of stress on the endocrine system	To include: <ul style="list-style-type: none"> • Production of Adrenalin and its effects • Effects of stress on other hormones • Effects on the reproductive systems of men and women
44. Understand, explain and recognise the causes and effects of the following diseases and disorders:	<ul style="list-style-type: none"> • Addison's Syndrome • Cushing's Syndrome • Amenorrhoea • Menopause • Pre-menstrual Syndrome • Polycystic ovarian syndrome • Stress
Unit 48 Laser and Intense Pulsed Light Practical	
45. Understand, explain and demonstrate the procedure for a tactile safety test	To include: <ul style="list-style-type: none"> ♦ The procedure for the test: <ul style="list-style-type: none"> • Taking a sharp end of a wooden stick and a piece of cotton and placing them alternately against the skin • Ask the client if they can tell the difference between the sharp and soft sensation
46. Understand, explain and demonstrate the procedure for a thermal safety test	To include: <ul style="list-style-type: none"> ♦ The procedure for the test: <ul style="list-style-type: none"> • Take a hot and cold test-tube full of water and place alternately against the client's skin to ascertain whether they feel the burning sensation of heat
47. Understand, explain and demonstrate the procedure for a patch test	To include: <ul style="list-style-type: none"> ♦ The procedure for the test:

	<ul style="list-style-type: none"> • Apply a small number of pulses to an area with similar hair and skin to the treatment site • Record settings • Wait for skin response, i.e. 24 - 72 hours depending on the skin type • Recognise adverse reactions
48. Understand, explain and demonstrate how to set up a working area for the treatment	<p>To include:</p> <ul style="list-style-type: none"> • All surfaces must be wiped with disinfectant and covered with couch roll • The machine and attachments should be ready and wiped over with sanitizer • Cotton wool • Cleanser • Sterilising solution • Tissues • Coupling gel
49. Understand, explain and select appropriate equipment	<ul style="list-style-type: none"> • Laser • Intense Pulsed Light
50. Understand, explain and recognise those contraindications to Laser and IPL treatments requiring medical referral or the client to indemnify their condition in writing prior to the treatment and those contraindications that restrict treatment	<p>♦ Contraindications requiring medical referral or the client to indemnify their condition in writing prior to treatment</p> <ul style="list-style-type: none"> • Any condition already being treated by a GP, dermatologist or another skin therapist • Medical oedema • Osteoporosis • Arthritis • Nervous/Psychotic conditions • Recent operations • Diabetes • Asthma • Bells Palsy • Trapped/Pinched nerve • Inflamed nerve • Acute rheumatism <p>♦ Contraindications that restrict treatment</p> <ul style="list-style-type: none"> • Fever • Contagious or infectious diseases • Under the influence of drugs or alcohol • Cancer • Pregnancy • Drugs or medications that cause photo-sensitisation or skin thinning effects • Herbal remedies that cause photo-sensitisation • Allergies to the products or materials used • Epilepsy • Cardio-vascular conditions (thrombosis, phlebitis, hypertension, hypotension, heart conditions) • Connective tissue disorders (scleroderma) • Herpes • Skin diseases • Undiagnosed lumps and bumps • Cuts • Bruises • Abrasions • Sunburn • Suntanned skin • Artificial tan until the product has faded from the skin • Areas of undiagnosed pain • Skin pigment conditions (vitiligo, melasma moles and pigmented naevi) • Keloid scars • Any metal pins or plates • Loss of skin sensitivity (test with tactile and thermal methods)
51. Understand, explain and demonstrate how to set up the equipment and check it is in good working order	<p>To include:</p> <ul style="list-style-type: none"> • Check there are no loose wires • Check there are no trailing wires • Check there is no water in the area • Explain the treatment and the sensation to the client • Ensure all attachments are sanitized before and after use on the client • Check all jewellery has been removed from both client and therapist (religious jewellery should be taped) • Do not make any contact with any metal articles
52. Understand, explain and demonstrate underpinning knowledge of the use of laser and intense pulsed light equipment	<p>To include:</p> <ul style="list-style-type: none"> • Laser • Intense Pulsed Light • Selection of equipment • Indications for use • Treatment effects
53. Understand explain and demonstrate skin cooling methods	<p>To include:</p> <ul style="list-style-type: none"> • Water cooled • Cryogen sprays • Cold gels
54. Understand, explain and demonstrate how to carry out a consultation for laser and intense pulsed light	<p>Taking into account the following:</p> <ul style="list-style-type: none"> • Private comfortable area • Positive body language • Positioning of the client (no barriers between themselves and client) • Good communication skills (asking open rather than closed questions) • Trust • Professionalism, confidence and enthusiasm • Confidentiality • Consent (see later notes on consent)

	<ul style="list-style-type: none"> • Any contraindications to treatment • Possible reasons for the hair growth/skin condition • Client lifestyle • Client profile • Importance of planning laser and IPL treatments and their frequency, taking into account: <ul style="list-style-type: none"> • Skin reaction • Appointments and frequency • Re-growth • Sensation • Client commitment • Skin healing • Safety • Home care advice • Special precautions prior to treatment • Contraindications • Confidentiality • Anonymity • When to refer to a dermatologist or other medical practitioner
55. Understand and explain pre-treatment care	To include: <ul style="list-style-type: none"> • 30 days prior to treatment • Importance of not tweezing, waxing, bleaching, sunbathing, using depilatory creams, electrolysis or a solarium • Avoid the use of self-tanning products 2 weeks prior to treatment
56. Understand, explain and demonstrate the importance of taking photographs of the treatment area before and after treatment	To include: <ul style="list-style-type: none"> • The condition of skin and hair prior to treatment • Suitability of treatment • Areas of skin to be avoided • Normal skin reaction to treatment • Poor reaction to treatment • Effectiveness of treatment
57. Understand, explain and demonstrate a test shot	To include: <ul style="list-style-type: none"> • Where to apply test shot and relevance to treatment site • Perform test shot according to the recommended settings • Observe immediate skin reaction and client discomfort
58. Understand, explain and demonstrate how to recognise skin reactions	To include: <ul style="list-style-type: none"> • Perifollicular erythema • Perifollicular oedema
Hair removal	
59. Understand, explain and demonstrate the procedure for a tactile safety test	To include: <ul style="list-style-type: none"> ♦ The procedure for the test: <ul style="list-style-type: none"> • Taking a sharp end of a wooden stick and a piece of cotton and placing them alternately against the skin • Ask the client if they can tell the difference between the sharp and soft sensation
60. Understand, explain and demonstrate the procedure for a thermal safety test	To include: <ul style="list-style-type: none"> ♦ The procedure for the test: <ul style="list-style-type: none"> • Take a hot and cold test-tube full of water and place alternately against the client's skin to ascertain whether they feel the burning sensation of heat
61. Understand, explain and demonstrate the procedure for a patch test	To include: <ul style="list-style-type: none"> ♦ The procedure for the test: <ul style="list-style-type: none"> • Apply a small number of pulses to an area with similar hair and skin to the treatment site • Record settings • Wait for skin response, i.e. 24 - 72 hours depending on the skin type • Recognise adverse reactions
62. Understand, explain and demonstrate how to recognise skin reactions	To include: <ul style="list-style-type: none"> • Perifollicular erythema • Perifollicular oedema
63. Understand, explain and demonstrate how to set up a working area for hair removal treatment	To include: <ul style="list-style-type: none"> • All surfaces must be wiped with disinfectant and covered with couch roll • The machine and attachments should be ready and wiped over with sanitizer • Cotton wool • Cleanser • Sterilising solution • Tissues • Coupling gel
64. Understand, explain and demonstrate how to carry out a consultation for hair removal treatment	Taking into account the following: <ul style="list-style-type: none"> • Private comfortable area • Positive body language • Positioning of the client (no barriers between themselves and client) • Good communication skills (asking open rather than closed questions) • Trust • Professionalism, confidence and enthusiasm • Confidentiality • Consent (see later notes on consent)

	<ul style="list-style-type: none"> • Any contraindications to treatment • Possible reasons for the hair growth/skin condition • Client lifestyle • Client profile • Importance of planning laser and IPL treatments and their frequency, taking into account: <ul style="list-style-type: none"> • Skin reaction • Appointments and frequency • Re-growth • Sensation • Client commitment • Skin healing • Safety • Home care advice • Special precautions prior to treatment • Contraindications • Confidentiality • Anonymity • When to refer to a dermatologist or other medical practitioner
65. Understand, explain and demonstrate a test shot	<p>To include:</p> <ul style="list-style-type: none"> • Where to apply test shot and relevance to treatment site • Perform test shot according to the recommended settings • Observe immediate skin reaction and client discomfort
66. Understand, explain and demonstrate how to set up the equipment and check it is in good working order	<p>To include:</p> <ul style="list-style-type: none"> • Check there are no loose wires • Check there are no trailing wires • Check there is no water in the area • Explain the treatment and the sensation to the client • Ensure all attachments are sanitized before and after use on the client • Check all jewellery has been removed from both client and therapist (religious jewellery should be taped) • Do not make any contact with any metal articles
67. Understand, explain and select appropriate equipment	<ul style="list-style-type: none"> • Laser • Intense Pulsed Light
68. Understand, explain and demonstrate how to prepare the client accordingly	<p>To include:</p> <ul style="list-style-type: none"> • Cleanse and prepare the area to be treated accordingly • Take photographs of the treatment area • Shave the treatment area • Ensure that all shaved hair is thoroughly removed • Examine the pigmented area and vessels to check if there is a need for referral prior to treatment • Analyse the skin type (Fitzpatrick scale) • Issue protective equipment • Apply coupling gel
69. Understand, explain and demonstrate the importance of taking photographs of the treatment area before and after treatment	<p>To include:</p> <ul style="list-style-type: none"> • The condition of skin and hair prior to treatment • Suitability of treatment • Areas of skin to be avoided • Normal skin reaction to treatment • Poor reaction to treatment • Effectiveness of treatment
70. Understand, explain and recognise those contraindications to Laser and IPL treatments requiring medical referral or the client to indemnify their condition in writing prior to the treatment and those contraindications that restrict treatment	<p>♦ Contraindications requiring medical referral or the client to indemnify their condition in writing prior to treatment</p> <ul style="list-style-type: none"> • Any condition already being treated by a GP, dermatologist or another skin therapist • Medical oedema • Osteoporosis • Arthritis • Nervous/Psychotic conditions • Recent operations • Diabetes • Asthma • Bells Palsy • Trapped/Pinched nerve • Inflamed nerve • Acute rheumatism <p>♦ Contraindications that restrict treatment</p> <ul style="list-style-type: none"> • Fever • Contagious or infectious diseases • Under the influence of drugs or alcohol • Cancer • Pregnancy • Drugs or medications that cause photo-sensitisation or skin thinning effects • Herbal remedies that cause photo-sensitisation • Allergies to the products or materials used • Epilepsy • Cardio-vascular conditions (thrombosis, phlebitis, hypertension, hypotension, heart conditions) • Connective tissue disorders (scleroderma) • Herpes • Skin diseases • Undiagnosed lumps and bumps • Cuts • Bruises • Abrasions • Sunburn • Suntanned skin

	<ul style="list-style-type: none"> • Artificial tan until the product has faded from the skin • Areas of undiagnosed pain • Skin pigment conditions (vitiligo, melasma moles and pigmented naevi) • Keloid scars • Any metal pins or plates • Loss of skin sensitivity (test with tactile and thermal methods)
71. Understand, explain and apply the treatment safely and effectively for the advised treatment time	<p>To include:</p> <ul style="list-style-type: none"> • Adhere to all safety precautions • Setting treatment parameters according to patch test results, skin and hair types • Apply the coupling gel ensuring minimal wastage • Perform a test shot • Awareness of the target chromophore (melanin) • The wavelengths to be used • The duration of the pulse • The correct energy settings (fluence) • Use the machine safely for the required amount of time
72. Understand, explain and demonstrate how to remove hairs from the following:	<ul style="list-style-type: none"> • Legs • Arms • Chin • Lip • Bikini Line • Abdomen • Back • Chest
73. Understand, explain and demonstrate the need to conclude the treatment safely and sanitise the equipment	<p>To include:</p> <ul style="list-style-type: none"> • Turn off the machine • Take photographs of the area treated • Sanitise the equipment
74. Understand, explain and demonstrate removal of any excess gel from the skin	<p>To include:</p> <ul style="list-style-type: none"> • Wipe the area with damp cotton wool or sponges to remove any gel • Dry skin with a soft cloth
75. Understand, explain and demonstrate post treatment care	<p>To include:</p> <ul style="list-style-type: none"> • Cool pack or cold compress if necessary
76. Understand, explain and give home care advice	<p>To include:</p> <ul style="list-style-type: none"> • Cold compress when appropriate • Suitable sunblock (SPF 30 or above) • Arrange next treatment
Skin rejuvenation, pigmentation and diffused redness	
77. Understand, explain and demonstrate the procedure for a tactile safety test	<p>To include:</p> <ul style="list-style-type: none"> ♦ The procedure for the test: • Taking a sharp end of a wooden stick and a piece of cotton and placing them alternately against the skin • Ask the client if they can tell the difference between the sharp and soft sensation
78. Understand, explain and demonstrate the procedure for a thermal safety test	<p>To include:</p> <ul style="list-style-type: none"> ♦ The procedure for the test: • Take a hot and cold test tube full of water and place alternately against the client's skin to ascertain whether they feel the burning sensation of heat
79. Understand, explain and demonstrate the procedure for a patch test	<p>To include:</p> <ul style="list-style-type: none"> ♦ The procedure for the test: • Apply a small number of pulses to an area with similar hair and skin to the treatment site • Record settings • Wait for skin response, i.e. 24 - 72 hours depending on the skin type • Recognise adverse reactions
80. Understand, explain and demonstrate how to recognise skin reactions	<p>To include:</p> <ul style="list-style-type: none"> • Perifollicular erythema • Perifollicular oedema
81. Understand, explain and demonstrate how to carry out a consultation for skin rejuvenation, pigmentation and diffused redness treatment	<p>Taking into account the following:</p> <ul style="list-style-type: none"> • Private comfortable area • Positive body language • Positioning of the client (no barriers between themselves and client) • Good communication skills (asking open rather than closed questions) • Trust • Professionalism, confidence and enthusiasm • Confidentiality • Consent (see later notes on consent) • Any contraindications to treatment • Possible reasons for the hair growth/skin condition

	<ul style="list-style-type: none"> • Client lifestyle • Client profile • Importance of planning laser and IPL treatments and their frequency, taking into account: • Skin reaction • Appointments and frequency • Re-growth • Sensation • Client commitment • Skin healing • Safety • Home care advice • Special precautions prior to treatment • Contraindications • Confidentiality • Anonymity • When to refer to a dermatologist or other medical practitioner
82. Understand, explain and demonstrate a test shot	<p>To include:</p> <ul style="list-style-type: none"> • Where to apply test shot and relevance to treatment site • Perform test shot according to the recommended settings • Observe immediate skin reaction and client discomfort
83. Understand, explain and select appropriate equipment	<ul style="list-style-type: none"> • Laser • Intense Pulsed Light
84. Understand, explain and demonstrate how to set up the equipment and check it is in good working order	<p>To include:</p> <ul style="list-style-type: none"> • Check there are no loose wires • Check there are no trailing wires • Check there is no water in the area • Explain the treatment and the sensation to the client • Ensure all attachments are sanitized before and after use on the client • Check all jewellery has been removed from both client and therapist (religious jewellery should be taped) • Do not make any contact with any metal articles
85. Understand, explain and demonstrate how to prepare the client accordingly	<p>To include:</p> <ul style="list-style-type: none"> • Cleanse and prepare the area to be treated • Take photographs of the treatment area • Shave the treatment area • Ensure that all shaved hair is thoroughly removed • Examine the pigmented area and vessels to check if there is a need for referral prior to treatment • Analyse the skin type (Fitzpatrick scale) • Issue protective equipment • Apply coupling gel
86. Understand, explain and demonstrate the importance of taking photographs of the treatment area before and after treatment	<p>To include:</p> <ul style="list-style-type: none"> • The condition of skin and hair prior to treatment • Suitability of treatment • Areas of skin to be avoided • Normal skin reaction to treatment • Poor reaction to treatment • Effectiveness of treatment
87. Understand, explain and recognise the most suitable skin type for treatment	<p>Skin types 1, 2 and 3 on the Fitzpatrick scale • Ethnic</p>
88. Understand, explain and recognise those contraindications to Laser and IPL treatments requiring medical referral or the client to indemnify their condition in writing prior to the treatment and those contraindications that restrict treatment	<p>♦ Contraindications requiring medical referral or the client to indemnify their condition in writing prior to treatment</p> <ul style="list-style-type: none"> • Any condition already being treated by a GP, dermatologist or another skin therapist • Medical oedema • Osteoporosis • Arthritis • Nervous/Psychotic conditions • Recent operations • Diabetes • Asthma • Bells Palsy • Trapped/Pinched nerve • Inflamed nerve • Acute rheumatism <p>♦ Contraindications that restrict treatment</p> <ul style="list-style-type: none"> • Fever • Contagious or infectious diseases • Under the influence of drugs or alcohol • Cancer • Pregnancy • Drugs or medications that cause photo-sensitisation or skin thinning effects • Herbal remedies that cause photo-sensitisation • Gold injections • Allergies to the products or materials used • Epilepsy • Cardio-vascular conditions (thrombosis, phlebitis, hypertension, hypotension, heart conditions) • Connective tissue disorders (scleroderma) • Herpes • Skin types 5 and 6 • Smoking within 2 hours of treatment for diffused redness

	<ul style="list-style-type: none"> • Skin diseases • Undiagnosed lumps and bumps • Cuts • Bruises • Abrasions • Sunburn • Suntanned skin • Artificial tan until the product has faded from the skin • Areas of undiagnosed pain • Skin pigment conditions (vitiligo, melasma moles and pigmented naevi) • Keloid scars • Any metal pins or plates • Loss of skin sensitivity (test with tactile and thermal methods)
89. Understand, explain and apply the treatment safely and effectively for the advised treatment time	<p>To include:</p> <ul style="list-style-type: none"> • Adhere to all safety precautions • Setting treatment parameters according to patch test results, skin and hair types • Apply the coupling gel ensuring minimal wastage • Perform a test shot • Awareness of the target chromophores (melanin and haemoglobins) • The wavelengths to be used • The duration of the pulse • The correct energy settings (fluence) • Ensure that the applicator only lightly touches the skin • Start the treatment on the least pain sensitive areas • Ensure that each shot overlaps the previous one • Avoid treating the same area immediately after the first shot • Use the machine safely for the required amount of time
90. Understand, explain and demonstrate the need to conclude the treatment safely and sanitise the equipment	<p>To include:</p> <ul style="list-style-type: none"> • Turn off the machine • Take photographs of the area treated • Sanitise the equipment
91. Understand, explain and demonstrate removal of any excess gel from the skin	<p>To include:</p> <ul style="list-style-type: none"> • Wipe the area with damp cotton wool or sponges to remove any gel • Dry skin with a soft cloth
92. Understand, explain and demonstrate post treatment care and referrals where necessary	<p>To include:</p> <ul style="list-style-type: none"> • Cool pack or cold compress only when necessary for client comfort
93. Understand, explain and give home care advice	<p>To include:</p> <ul style="list-style-type: none"> • Not exposing to sunlight for at least 4 weeks after treatment • Suitable sun protection lotion (minimum SPF 30 or above) • Appropriate interval between treatments

Unit 48 Laser and Intense Pulsed Light Evidence of Treatments	
<p>Evidence of treating 10 clients across the range of skin/hair types to show the range of treatments, i.e. hair removal, sun damaged skin and photo-rejuvenation and all evidence to be documented.</p> <p>These are internally assessed by the college lecturer and verified by the ITEC Practical Examiner</p>	<p>To include:</p> <ul style="list-style-type: none"> • Consultation • Medical History • Patch test • Photographic evidence • Treatment details • Reaction during treatment • Client feedback • Aftercare/Home care advice <p>Treatments should be evidenced through the consultation form. See www.itecworld.co.uk for a sample consultation form and evidence of treatments guidance form.</p>