MUHLE

GLOW BEAUTY

SCALP MICROPIGMENTATION

FULL PROFESSIONAL STUDY & PRACTICAL TRAINING MANUAL

MUHLE Glow Beauty Resource Library

TRAINER: AALIYAH

Student • Examination • Practical Certification Edition

STUDENT PURPOSE, SCOPE & PROFESSIONAL STANDARD

Purpose. This manual provides the theoretical foundation for advanced scalp micropigmentation (SMP): scalp and hair science, client assessment, design, colour theory, equipment, hygiene, treatment planning, aftercare, touch-ups, complications, documentation and examination preparation.

Important. SMP is a cosmetic micropigmentation procedure, not a surgical hair-restoration procedure. It creates the visual impression of closely shaved follicles or increased density. It does not grow hair or recreate a follicle.

Certification. Online study alone does not establish practical competency. MUHLE students must complete supervised hands-on practical training and competency assessment before independent professional practice.

Learning outcomes. Students should be able to assess suitable cases, design a natural hairline, explain pigment and equipment principles, prepare a safe treatment environment, understand the treatment workflow, provide aftercare, manage follow-up and identify when to stop or refer.

CONTENTS & COURSE MAP

CHAPTER 1 — FOUNDATIONS OF SCALP MICROPIGMENTATION

What is SMP? Scalp micropigmentation uses controlled cosmetic pigment impressions to imitate the appearance of hair follicles. It may be used for shaved-head appearance, diffuse thinning, receding hairlines, selected alopecia patterns and some scars.

What SMP cannot do: it cannot regrow hair, replace missing scalp tissue, permanently restore hair density, diagnose hair loss or guarantee a particular healed colour.

Core professional objective: create believable follicular impressions with a natural transition, appropriate density and colour—not a solid painted scalp.

Three foundations: correct client selection + realistic design + conservative pigment placement.

CHAPTER 2 — SCALP ANATOMY, HAIR & HAIR LOSS

Scalp structures. The scalp includes epidermis, dermis, subcutaneous tissue, blood vessels, nerves and hair follicles. Cosmetic pigment should be placed conservatively within the appropriate superficial skin layer as taught in supervised practical training.

Hair follicle. A follicle is a living biological structure. SMP does not recreate it; the practitioner creates an optical representation of its visible appearance.

Pattern/condition	SMP planning consideration
Shaved/bald scalp	Design a natural hairline and consistent follicular pattern.
Diffuse thinning	Match existing density and avoid a visibly artificial solid block.
Receding hairline	Respect facial proportions and the client's natural/age-appropriate hairline.
Alopecia	Assess stability, skin condition and medical history; do not assume every case is suitable.
Scar	Assess scar maturity, colour, texture and stability before considering camouflage.

Medical referral principle: sudden, unexplained or actively changing hair loss should be medically assessed rather than treated as a purely cosmetic issue.

CHAPTER 3 — CONSULTATION, SCREENING & CLIENT ASSESSMENT

Consultation sequence: history → scalp assessment → hair-loss pattern → goals → design → colour discussion → contraindication screening → informed consent → photography → treatment plan.

Ask about: diagnosis/cause of hair loss; progression or stability; scalp disease; allergies/reactions; previous SMP/tattooing; medications and relevant medical history; recent surgery, transplant, laser or chemical treatments; abnormal scarring; and previous pigment problems.

Postpone/refer: active infection, open/compromised skin, significant inflammation, unexplained lesions, active dermatitis, suspected contagious scalp condition, unstable medical hair loss where assessment is needed, or any case outside practitioner competence.

CHAPTER 4 — HAIRLINE & DENSITY DESIGN

Hairline is an optical design. It should reflect facial proportions, age, existing hair pattern, client preference and the expected long-term appearance.

Design area	Professional principle
Front hairline	Avoid a ruler-straight line; use controlled irregularity and gradual transition.
Temples	Blend with facial anatomy and existing recession; avoid abrupt corners.
Mid-scalp	Follow the client's natural growth pattern and density.
Crown	Respect the natural swirl/whorl impression; avoid uniform dots.
Diffuse thinning	Increase visual density gradually without creating a helmet effect.

Mapping exercise: assess the face from front and profile; identify the existing hairline/transition; mark a conservative proposed boundary; obtain client approval before treatment.

Golden rule: never design a hairline that the client may regret as they age. A conservative, age-appropriate result is usually more durable aesthetically.

CHAPTER 5 — COLOUR THEORY & PIGMENT SELECTION

Goal: match the optical appearance of follicular stubble, not the colour of a bottle cap or a single hair.

Factor	Consider
Natural hair	Darkness, warmth/coolness and shaved/stubble appearance.
Scalp tone	Undertone, Fitzpatrick response and visible redness.
Existing pigment	Brand, age, colour shift, density and prior work.
Lifestyle	Sun exposure, shaving routine and maintenance expectations.
Healing	Pigment may settle lighter/different after healing.

Never guess. Use professional pigments intended for the procedure, record brand/colour/batch, and follow supplier/manufacturer guidance. Avoid over-darkening because adding pigment is easier than reversing an over-saturated result.

CHAPTER 6 — EQUIPMENT, PRODUCTS & TREATMENT ROOM

Core equipment: professional SMP/PMU device; manufacturer-approved sterile single-use cartridges; professional SMP pigments; pigment cups; mapping pencils; measuring tools; task lighting; treatment bed/chair; magnification where appropriate; barrier film; PPE; sterile/clean supplies; sharps container; clinical waste system; and aftercare products.

Equipment/product	Purpose
SMP/PMU machine	Controlled cosmetic pigment implantation; exact operation taught hands-on.
Sterile cartridges	Single-use pigment delivery; compatible with the machine.
Pigments	Professional, traceable cosmetic pigments suitable for SMP.
Mapping tools	Hairline, symmetry and zone planning.
Lighting	Clear visibility of scalp and pigment placement.
Barrier protection	Reduces contamination of machine, cables and surfaces.
Sharps/waste containers	Safe disposal of used cartridges and contaminated waste.
Aftercare supplies	Support written post-treatment care instructions.

Settings warning: there is no universal safe needle depth, voltage, speed or pass count. These depend on the device, cartridge, pigment, scalp and practitioner technique and must be taught under supervision and according to manufacturer instructions.

CHAPTER 7 — HYGIENE, INFECTION PREVENTION & SAFETY

Before: clean/disinfect surfaces; prepare clean and contaminated zones; check sterile packaging, expiry and equipment; perform hand hygiene; apply PPE; barrier-protect equipment and cables.

During: maintain aseptic workflow; avoid touching clean items with contaminated gloves; use single-use cartridges only; prevent pigment bottle contamination; dispose of sharps safely.

After: dispose of cartridges; manage waste correctly; remove barriers; clean/disinfect reusable equipment according to manufacturer instructions; document pigment batch/lot and treatment details.

Stop immediately for unexpected severe pain, significant bleeding, suspected acute reaction, fainting or other concerning response and follow appropriate emergency/referral procedures.

CHAPTER 8 — BEFORE-TREATMENT PROTOCOL

1. **Consultation:** establish goals and explain realistic results.
2. **Scalp assessment:** identify pattern, skin condition, existing pigment and scar areas.
3. **Contraindication screening:** postpone or refer where required.
4. **Photographs:** front, sides, top and relevant crown views in consistent lighting.
5. **Design:** map hairline, temple transition and density zones.
6. **Colour plan:** document pigment choice and any planned blend.
7. **Consent:** explain healing, fading, maintenance, risks, limitations and possible touch-up.
8. **Final approval: client confirms design before treatment begins.**

CHAPTER 9 — MUHLE SMP TREATMENT METHOD

MUHLE Method: ASSESS → DESIGN → PREPARE → MAP → BUILD → BLEND → REVIEW → HEAL → REFINE.

Stage	Action
ASSESS	Evaluate scalp, hair loss, skin, prior work and suitability.
DESIGN	Create age-appropriate hairline and treatment zones.
PREPARE	Set up clean/aseptic field and documented equipment/products.
MAP	Confirm boundaries and symmetry before pigment work.
BUILD	Develop follicular appearance conservatively in planned zones.
BLEND	Transition density and colour naturally between zones.
REVIEW	Assess immediate result; avoid chasing perfection while skin is fresh.
HEAL	Provide written aftercare and follow-up.
REFINE	Reassess healed result and perform appropriate touch-up if required.

Practical principle: exact needle configuration, device settings, depth and pass technique must be learned hands-on. Students should not copy settings from videos or another practitioner.

CHAPTER 10 — SCALP ZONES & TREATMENT PLANNING

Front hairline: build the transition gradually; avoid a dense, uniform edge.

Frontal zone: establish believable follicular rhythm and blend into existing hair.

Mid-scalp: maintain density consistency while respecting existing hair.

Crown: follow natural whorl direction and avoid a circular painted appearance.

Temples: use facial anatomy and existing recession as design references.

Scar areas: treat only after assessing scar maturity, texture, colour and stability; some scars may not be suitable.

Diffuse thinning: match visual density rather than attempting to cover every visible scalp area.

Session planning: complex work may require multiple sessions. Never promise a one-session result without assessment.

CHAPTER 11 — HEALING, AFTERCARE & TOUCH-UPS

Immediately after: mild redness, sensitivity and pinpoint bleeding can occur. Follow the pigment and device manufacturer's aftercare guidance.

General care: keep the scalp clean as instructed; do not scratch or pick; avoid contamination and unnecessary friction; follow the practitioner's instructions for washing, exercise, swimming and sun exposure.

Healing: pigment can appear darker initially and then settle. Do not judge the final result too early.

Touch-up: schedule a healed assessment. Correct only areas with insufficient retention or imbalance. Touch-up is not automatically required.

Do not touch up: active irritation, infection, abnormal swelling, unresolved reaction or inadequately healed skin.

Maintenance: longevity varies with skin, sun exposure, shaving, lifestyle, pigment and technique. Explain that future refresh sessions may be needed.

CHAPTER 12 — COMPLICATIONS, CORRECTIONS & REFERRAL

Observation	Professional response
Mild expected redness/sensitivity	Give standard aftercare and monitor.
Increasing pain, heat, swelling or discharge	Stop treatment and advise prompt medical assessment.
Unexpected pigment reaction	Stop exposure/treatment and seek appropriate professional/medical guidance.
Colour shift	Allow healing, document and plan conservative correction.
Over-saturation	Do not immediately add more pigment; assess healed result and consider specialist correction/referral.
Active scalp condition	Do not pigment over it; refer where diagnosis/treatment is needed.

CHAPTER 13 — SCAR CAMOUFLAGE & SPECIAL CASES

Scar assessment: confirm the scar is mature, stable, closed and suitable for cosmetic pigmentation. Texture, vascularity and colour may affect results.

Hair-transplant scars: obtain relevant history and ensure the area is appropriately healed. Pigment does not replace missing tissue and may not match scar tissue exactly.

Alopecia: determine whether the condition is stable and whether medical assessment is required. A practitioner should never promise permanence where the underlying condition is changing.

Existing SMP: document pigment age, colour, density, shape and any colour shift. Do not automatically layer new pigment over old work.

Specialist referral: unusual lesions, active disease, significant scarring, unexplained hair loss or difficult corrective work should be referred to an appropriate qualified professional.

CHAPTER 14 — PRICING, BUSINESS & PROFESSIONAL PRACTICE

MUHLE training benchmark: SMP treatment pricing should be quoted after consultation because scalp size, degree of hair loss, sessions, scar work and complexity vary.

Service level	Illustrative treatment positioning
Hairline / small area	R3,500–R5,000+
Diffuse thinning / larger area	R6,000–R9,500+
Full shaved-head SMP	R9,500–R15,000+
Scar camouflage	From approximately R2,500+, depending on size/complexity

Important: these are MUHLE planning benchmarks, not verified current competitor prices. Final pricing should account for consumables, practitioner time, room overhead, equipment, insurance, training, follow-up and profit.

MUHLE professional shop. Once students have successfully completed theory, supervised practical training and competency assessment, MUHLE may offer verified practitioners access to professional SMP equipment, pigments and consumables, subject to supplier and applicable requirements.

CHAPTER 15 — PRACTICAL TRAINING & COMPETENCY

Pathway: Aaliyah online theory → professional demonstration videos → theory examination → approved practical placement → supervised live-model work → practical assessment → competency decision → certification → qualified-practitioner equipment access.

Student must demonstrate: consultation, scalp analysis, design, colour selection, hygiene, safe setup, documentation, supervised technique, hairline transition, density management, aftercare and professional client communication.

Practical providers. MUHLE may partner with approved service providers and compensate them for student practical placements. Provider agreements should cover supervision, equipment, consumables, client consent, insurance/liability, hygiene and assessment responsibilities.

Certification distinction: online theory completion is not the same as practical competency certification.

PRACTICAL COMPETENCY CHECKLIST

- ■ Consultation and hair-loss history completed
- ■ Scalp condition and suitability assessed
- ■ Contraindications screened
- ■ Before photographs completed
- ■ Hairline and zone design mapped
- ■ Client approved design
- ■ Colour/pigment plan documented
- ■ Clean/aseptic setup demonstrated
- ■ Single-use cartridge handling demonstrated
- ■ Treatment performed under supervision
- ■ Hairline transition and density demonstrated

- Crown/zone planning demonstrated
- Aftercare explained
- Follow-up/touch-up plan recorded
- Waste and equipment managed safely
- Professional documentation completed
- Student demonstrated professional client communication

CHAPTER 16 — THEORY EXAMINATION

1. Define scalp micropigmentation and state what it does not do.
2. Why is SMP considered an optical rather than biological hair-restoration procedure?
3. Name five factors that can contribute to hair loss or visible scalp.
4. Why should sudden or unexplained hair loss be medically assessed?
5. List five items that should be covered during consultation.
6. Why is hairline design one of the most important parts of SMP?
7. Explain why a ruler-straight hairline can look unnatural.
8. Name six pieces of equipment used in SMP.
9. Why must cartridges be sterile and single-use?
10. What pigment information should be documented?
11. Explain the MUHLE ASSESS → DESIGN → PREPARE → MAP → BUILD → BLEND → REVIEW → HEAL → REFINE method.
12. Why should machine settings not be copied blindly from another practitioner?
13. Describe the purpose of a healed touch-up assessment.
14. List five aftercare principles.
15. Give four signs that require prompt medical assessment or referral.
16. How should a practitioner approach existing SMP that has changed colour?
17. What factors affect SMP longevity?
18. Why must scars be assessed for maturity and stability?
19. Explain why practical training is essential before independent SMP practice.
20. What must a student complete before accessing MUHLE's professional equipment shop?

MODEL ANSWER GUIDE — KEY POINTS

1. Cosmetic pigment impressions that mimic follicles; it does not grow hair or recreate follicles.
2. It creates an appearance through pigment rather than restoring biological hair growth.
3. Genetics, androgenetic hair loss, alopecia, ageing, illness, hormonal factors, scarring, etc.
4. Because active/unknown causes may require diagnosis and medical management.
5. Goals, history, scalp condition, hair-loss pattern, prior procedures, contraindications, expectations, design, consent.
6. It determines the first impression and long-term natural appearance.
7. Natural hairlines contain irregularity and gradual density transitions; straight lines look artificial.
8. Machine, sterile cartridges, pigments, mapping tools, lighting, PPE, barriers, sharps container, etc.
9. To reduce infection/cross-contamination risk and because they are designed for single use.
10. Brand, shade/formula, batch/lot, expiry where applicable and supplier/product details.
11. Assess, design, prepare, map, build, blend, review, heal and refine.
12. Device, cartridge, pigment, skin and practitioner technique vary; supervised training and manufacturer instructions govern.
13. To judge true healed retention before adding more pigment.
14. Keep clean as instructed, don't pick/scratch, avoid contamination/friction, follow washing/exercise/swimming advice and sun protection guidance.
15. Escalating pain, marked swelling/heat, discharge, significant reaction or other concerning symptoms.
16. Document it, allow healing, assess the cause and use conservative correction or specialist referral.
17. Skin, sun exposure, lifestyle, shaving, pigment, technique and maintenance.
18. Immature/unstable scars can change and may respond unpredictably.
19. SMP is hands-on; competence requires supervised observation, practice and assessment.
20. Successful theory, required practical placement and competency assessment, with verified status.

CLIENT CONSULTATION & TREATMENT RECORD — STUDENT TEMPLATE

Client name / ID	_____
Date	_____
Hair-loss pattern	Shaved / Receding / Diffuse / Alopecia / Scar / Other
Scalp condition	Intact / Irritated / Compromised / Other: _____
Medical/referral concerns	_____
Previous SMP / tattoo / transplant	_____
Proposed hairline / zones	_____
Pigment brand / shade / batch	_____
Treatment plan / sessions	_____
Aftercare supplied	Yes / No
Follow-up date	_____
Image consent	Yes / No / Limited

Client acknowledgement: I understand the proposed SMP treatment, its cosmetic nature, expected healing, possible fading/colour change, possible need for multiple sessions/touch-ups, limitations and risks. I understand that SMP does not restore biological hair growth and that I may be referred where assessment or treatment is outside the practitioner's scope.

Client signature: _____ Practitioner: _____ Date: _____

CLIENT AFTERCARE HANDOUT

- Follow the practitioner's written scalp-care instructions exactly.
- Do not scratch, pick or deliberately remove healing skin.
- Avoid contamination, excessive friction and activities restricted by your practitioner during healing.
- Follow instructions about washing the scalp and returning to normal shaving.
- Protect healed scalp from excessive sun exposure according to professional advice.
- Do not book a touch-up until the scalp has healed and has been assessed.
- Contact the practitioner about unusual or worsening symptoms.
- Seek appropriate medical assessment for significant pain, marked swelling, heat, discharge, severe reaction or other concerning symptoms.

MUHLE PROFESSIONAL STANDARD

Precision. Natural design. Safety. Professional judgement. The best SMP is not the darkest SMP. It is the result that looks believable for the client's scalp, facial proportions, hair pattern and lifestyle.

MUHLE certification principle: Theory knowledge + supervised practical training + demonstrated competency = professional readiness. Students must comply with applicable South African requirements, workplace policies, supplier instructions, infection-control standards and insurance requirements.

