

**CURRICULUM AND SYLLABUS
FOR MEMBERSHIP TRAINING
OF ADVANCED PRACTICE NURSES**

Curriculum and Syllabus for Membership Training of Advanced Practice Nurses

1. Introduction

This paper explains the design of the curriculum and syllabus necessity to become an advanced practice nurse (APN). The curriculum and syllabus for APN in Orthopaedics are structured following the requirement from the Hong Kong Academy of Nursing Guidelines for Program Planning and Examination (The Hong Kong Academy of Nursing, 2015).

2. Objectives of the training on APN in Orthopaedics

The training of APN aims at equipping orthopaedic nurses in both theory and clinical practice.

- Equip orthopaedic nurses on sound theoretical-based in basic science, clinical knowledge, evidence-based concept as well as people and organizational management
- Prepare orthopaedic nurses to execute effective clinical skills for caring orthopaedic patients in various settings

3. The training of APN in theory and practice

The training of APN consists of both classroom teaching (theory) and clinical practicum (practice). This paper focuses on the theory part. Regarding to the practical training, please refer to “Orthopaedic Nursing Training – Clinical Log Book”.

4. Learning outcomes on theoretical training

Upon completion of theoretical training, orthopaedic nurses are able to achieve the followings.

- Recognize the principle of orthopaedic nursing practice
- Understand the related musculoskeletal anatomy, physiology and pathophysiology
- Understand the principle of both basic and advanced nursing practice
- Realize and apply the evidence-based orthopaedic nursing practice

5. Theoretical training

The Orthopaedic nurse education framework consists of three major components including the generic core, advanced practice core and specialty core. According to the direction from the Hong Kong Academy of Nursing (2015), 60 to 100% structure courses offered at the post-graduate level and the remaining 0 to 40% structured courses offered by specialty course providers.

In order to meet the competencies required of an Advanced Practice Orthopaedic Nurse, trainee has to complete at least 500 hours theory education with the following curriculum (Table 1) and syllabus (Table 2) of subject requirement during the three years of membership training.

Table 1 Curriculum Framework for APN in orthopaedics

	Generic Core (Minimum contact hours)	Advanced Practice Core (Minimum contact hours)	Specialty Core (Minimum contact hours)
Structured courses at post-graduate level (60-70%)	<ul style="list-style-type: none"> • At least 6 modules of the followings <ul style="list-style-type: none"> ▪ General clinical practice (17) ▪ Fundamental of nursing ▪ Theoretical function of nursing practice (30) ▪ Behavioral sciences (30) ▪ Public and primary health (30) ▪ Professional, ethical and legal aspects of nursing practice (30) ▪ Health promotion and disease prevention (30) ▪ Health care system organization/ health care policy/ health care financing (30) 	<ul style="list-style-type: none"> • At least 4 modules of the followings: <ul style="list-style-type: none"> ▪ Advanced health/ physical assessment (30) ▪ Biological science (30) ▪ Pharmacology (30) ▪ Evidence-based practice/ clinical decision making (30) ▪ Nursing/ clinical research (30) ▪ Complementary and alternative medicine (CAM) (30) ▪ Team collaboration/ communication (30) • Essentials in orthopaedic nursing (24) • Advanced orthopaedic nursing practice (23) 	<ul style="list-style-type: none"> • Sub-specialty orthopaedic nursing practice (94) • Elective advanced care management on orthopaedic (50) (select 5 orthopaedic advanced care management) • Clinical leadership/ patient advocacy (30)
Structured courses provided by specialty course provider (30-40%)			
Total (minimum 500 hours)	Minimum 167 hours	Minimum 167 hours	Minimum 167 hours

Master course -

Table 2 Syllabus of Subjects

Generic core		Minimum 176 hours
Item	Topics (Any 6 modules of the following)	Minimum hours
1	General clinical practice <ul style="list-style-type: none"> • Infection control • Occupational safety • Occupational health • Documentation 	17
2	Fundamental of nursing	30
3	Theoretical function of nursing practice <ul style="list-style-type: none"> • Nursing theory • Nursing knowledge and perspective 	30
4	Behavioral sciences <ul style="list-style-type: none"> • Psychology • Sociology • Social and cultural dimensions of health • Communication and counseling skills • Managing people • Teaching skills 	30
5	Public and primary health <ul style="list-style-type: none"> • Concepts of health • Epidemiology • Primary health care • Community nursing • Nursing for elderly 	30
6	Professional, ethical and legal aspects of nursing practice <ul style="list-style-type: none"> • Professional nursing concepts • Conduct and practice • Ethics and law in clinical practice • Risk assessment and risk management 	30
7	Health promotion and disease prevention	30
8	Health care system organization/ health care policy/ health care financing <ul style="list-style-type: none"> • Organization behavior • Health care economics • Health service management • Nursing management • Quality management of nursing services 	30

Table 2 Syllabus of Subjects (cont'd)

Advanced practice core		Minimum 176 hours
Item	Topics (Any 4 modules from no. 9 to 15)	Minimum hours
9	Advanced health and physical assessment <ul style="list-style-type: none"> Advanced practice on history taking and age appropriate health assessment Problem-focused physical assessment and related to clinical practice 	30
10	Biological sciences <ul style="list-style-type: none"> Orthopaedic related anatomy and physiology on <ul style="list-style-type: none"> Spine Foot and ankle Hand Upper limb and lower limb Microbiology 	30
11	Pharmacology <ul style="list-style-type: none"> Pharmacokinetics and pharmacodynamics Pharmacology related to advanced nursing practice Pharmacology across the life span for orthopaedic patients 	30
12	Evidence-based practice/ clinical decision making <ul style="list-style-type: none"> Location of evidence and the critical understanding of evaluating evidence in order to inform clinical decision-making Application of evidence-based practice contextualized in the clinical specialty Analysis of best available evidence to guide practice and clinical decision making 	30
13	Nursing/ clinical research <ul style="list-style-type: none"> Concepts of research design Biostatistics 	30
14	Complementary and alternative medicine <ul style="list-style-type: none"> Exploration the state of the evidence in areas of complementary and integrative medicine Clinical integration of various CAM modalities 	30
15	Team collaboration/ communication <ul style="list-style-type: none"> Organization behavior Conflict management Change theory and managing of change Inter-personal and organizational communication 	30

Table 2 Syllabus of Subjects (cont'd)

Advanced practice core		Minimum 176 hours
Item	Topics	Minimum hours
16	<p>Essential in orthopaedic nursing</p> <ul style="list-style-type: none"> • Fracture classification and treatment • External fixator care • General care on total joint replacement • Upper limb trauma • Lower limb trauma • Pelvic trauma • General care on amputee and amputation • General care on spinal injury • Orthopaedics wound management • Sport injury • Traction • Care on cast • Infectious control in orthopaedic (e.g. MRSA control and outbreak in ward) • Allied health practice in Orthopaedics <ul style="list-style-type: none"> ▪ Physiotherapy ▪ Occupational therapy ▪ Prosthetic and Orthotic 	24
17	<p>Advanced orthopaedic nursing practice</p> <ul style="list-style-type: none"> • X-ray interpretation and radiographic investigation in orthopaedics • Necrotizing fasciitis • Musculoskeletal infection and management • Microbiologist's perspectives in orthopaedic conditions • Updated traction, casting and bandaging technique • Pain management for orthopaedic patients <ul style="list-style-type: none"> ▪ Nurses role in orthopaedics • Advanced wound care in orthopaedics <ul style="list-style-type: none"> ▪ Different types of ulcers in orthopaedics ▪ General principles on ulcer care ▪ Nursing interventions and care of specific type of orthopaedic ulcer • Common types of medication in orthopaedics <ul style="list-style-type: none"> ▪ Effect and side-effect ▪ Point of care for patients taking orthopaedic medication • Day surgery service and specific care • Nurse-led pre-operative assessment 	23

Table 2 Syllabus of Subjects (cont'd)

Specialty core		Minimum 176 hours
Item	Topics	Minimum hours
18	<p>Sub-specialty orthopaedic nursing practice in</p> <ul style="list-style-type: none"> • Musculoskeletal tumors <ul style="list-style-type: none"> ▪ Knowledge on care of patients with musculoskeletal tumors ▪ Musculoskeletal rehabilitation ▪ Psychosocial support ▪ Nutritional support • Trauma <ul style="list-style-type: none"> ▪ Common mechanism of injuries ▪ Relationship between the mechanism of injuries to the related bone and soft tissue trauma ▪ The clinical features of fractures, dislocation and severe soft tissue injury ▪ Recognition the possible physiological and psychosocial problems of clients ▪ Appropriate nursing care and coordination ▪ Pre-operative, post-operative and rehabilitative management strategy ▪ Complication prevention ▪ Post-trauma associated pain control ▪ Geriatric care ▪ Relevant patient education regarding patient's needs, understanding and ability ▪ Osteoporosis and sacropenia • Hand <ul style="list-style-type: none"> ▪ Anatomical structure and function of hand related to injury ▪ Common acute and non-acute hand injuries and related treatment modalities ▪ Comprehensive nursing assessment on hand ▪ Traumatic micro-vascular surgery as well as related pre and post-operative nursing interventions ▪ Replantation surgery and specific post-operative care ▪ Potential complications and preventive measures ▪ Impact on hand injury/ problem to activity of daily living ▪ The role and treatment modalities of allied health colleagues on hand injury/ problem ▪ Collaborate with other disciplines for better functional outcomes 	94

Table 2 Syllabus of Subjects (cont'd)

Specialty core		Minimum 176 hours
Item	Topics	Minimum hours
18	<p>Sub-specialty orthopaedic nursing practice in (cont'd)</p> <ul style="list-style-type: none"> • Foot and ankle <ul style="list-style-type: none"> ▪ Anatomical structure and physiological function of foot related to injury ▪ Common congenital and acquired foot problem/ injury as well as related treatment modalities ▪ Foot circulation and structural defect assessment ▪ Prevention and emergency care on compartment syndrome ▪ Post-operative care on lower limb amputation ▪ Knowledge on different types of prosthesis and orthotics in enhancing patient's rehabilitation ▪ Gait assessment and impact to patient ▪ The role and treatment modalities of allied health colleagues on foot injury/ problem ▪ Collaborate with other disciplines for better functional outcomes • Spine <ul style="list-style-type: none"> ▪ Common spinal problem and related treatment modalities ▪ Neurological assessment ▪ Acute management of spinal cord injuries ▪ Overall concept on spinal rehabilitation and impact on activity of daily living ▪ Care on chronic low back pain and impact on patients • Total joint replacement <ul style="list-style-type: none"> ▪ Joint replacement surgery on lower limb and the related nursing implications ▪ The role of nurses in clinical pathway on joint replacement surgery ▪ Impact of rheumatological disease to joint degeneration ▪ Venous thromboembolism prevention and management in orthopaedics ▪ Complication and infection prevention • Sport injury <ul style="list-style-type: none"> ▪ Anatomical structure of shoulder, elbow, knee and ankle related to sporty injury ▪ Principle of care on sport medicine and the nursing implication ▪ Acute management of knee and shoulder injuries related nursing care ▪ Physiotherapy perspective on sport rehabilitation and impact on nursing care 	

Table 2 Syllabus of Subjects (cont'd)

Specialty core		Minimum 176 hours
Item	Topics	Minimum hours
19	<p>Elective advanced care management on orthopaedic in (select 5 out of 7)</p> <ul style="list-style-type: none"> • Orthopaedic related tissue viability and soft tissue re-surfacing <ul style="list-style-type: none"> ▪ Anatomical structure of tendons, muscle and blood vessels related to the orthopaedic ulcer management ▪ Molecular pathology on orthopaedic tissue viability ▪ Clinical reasoning on intervention objective ▪ Topical intervention regarding molecular alternations ▪ Soft tissue viability management ▪ New conjunctive treatment in orthopaedic tissue viability • Trauma <ul style="list-style-type: none"> ▪ Pre-hospital and site management for orthopaedic patient ▪ Major trauma, polytrauma and pelvic fracture in orthopaedic pateints ▪ Specific care on open fracture, and pelvic fracture ▪ Specific nursing assessment skills to traumatized patients and related documentation ▪ Interpretation of radiological findings ▪ Interpretation of abnormal laboratory findings ▪ Integration of clinical, radiological and laboratory findings into full clinical picture ▪ Correlation of all the findings to patient's needs and specific nursing care • Paediatric orthopaedics <ul style="list-style-type: none"> ▪ Common congenital disorder and the nursing impact ▪ Normal and abnormal radiological interpretation ▪ Pre-operative and post-operative care ▪ Latest development of related surgeries and the impact on nursing care development ▪ Rehabilitation and community care ▪ Psychosocial impact of the patient and family ▪ Developmental impact of paediatric patients • Sport injury and nursing on related latest development <ul style="list-style-type: none"> ▪ Latest surgical development on shoulder/ knee injury and the nursing care development ▪ The use of ultrasound assessment on soft tissue injury in nursing ▪ The use of adjuvant therapy on soft tissue injury as well as related nursing care ▪ Sport injury on athletics and the nursing impact ▪ Role of allied health 	50

Table 2 Syllabus of Subjects (cont'd)

Specialty core		Minimum 176 hours
Item	Topics	Minimum hours
19	<p>Elective advanced care management on orthopaedic (select 5 out of 7) (cont'd)</p> <ul style="list-style-type: none"> • Fragility hip fracture <ul style="list-style-type: none"> ▪ Nursing role in fragility hip fracture pathway ▪ Specific nursing care regarding nursing quality indicators on fragility hip fracture ▪ Latest surgical development of fragility hip fracture and the impact to nursing care ▪ Elderly friendly model of care and fragility hip fracture ▪ Geriatrician and fragility hip fracture as well as nursing impact ▪ The role of allied health and the impact to nursing development ▪ The discharge planning for patient after fragility hip fracture • Handling difficult conditions on total joint replacement <ul style="list-style-type: none"> ▪ Care on joint replacement surgery on patient with multiple co-morbidities ▪ Care of patient with joint revision and infection ▪ Radiological assessment on joint replacement ▪ Community care and available resources on joint replacement ▪ Nurse-led clinic service on joint replacement ▪ Latest development on joint replacement service and impact to nursing • Handling complex conditions on spinal problem <ul style="list-style-type: none"> ▪ Comprehensive neurological assessment and clinical variances in spinal nursing ▪ Specific individualized nursing care on spinal cord injuries ▪ Community resources on spinal cord injuries and the nursing impact ▪ The discharge planning of patients after spinal cord injuries ▪ Handling complex spinal rehabilitation in community ▪ Sexual rehabilitation on spinal cord injury ▪ Alternative therapies on low back pain 	
20	<p>Clinical leadership/ patient advocacy</p> <ul style="list-style-type: none"> • Leadership theory, styles, contemporary approach and strategies • Problem solving and data-driven decision making • Team-building 	30

6. Design and framework of orthopaedic specific module

The above items from 16 to 19 in the “syllabus of subject” are the orthopaedic specific modules. They are designed under the Hong Kong Academy of Nursing Competence Statements for Advanced Practice Nurses (The Hong Kong Academy of Nursing, 2015). The matching of orthopaedic specific modules to the domains of this competence framework is indicated as below (Table 3).

Table 3 Matching of orthopaedic specific module to competence framework

Subject areas	Domains						
	1	2	3	4	5	6	7
Essential in orthopaedic nursing							
• Fracture classification and treatment	All	All	20,22,23,24,25	28,29	32,33,34	40,42,44,47,49	53
• External fixator care	All	All	20,22,23,24	26,28	33,34,38	42,44,45	53
• General care on total joint replacement	All	All	All	26,28,29,30	32,33,35,36,37,38	41,42,43,44,50	53
• Upper limb trauma	All	All	20,21,22,23	26,28	32,33,34,38	43,44	53
• Lower limb trauma	All	All	20,21,22,23	26,28	32,33,34,38	43,44	53
• Pelvic trauma	All	All	20,21,22,23	26,28	32,33,34,38	43,44	53
• General care on amputee and amputation	All	All	All	26,28,30,31	32,33,37,38	40,42,43,44,47,50	53
• General care on spinal injury	All	All	All	26,28,30	32,33,37,38	40,42,49	53
• Orthopaedics wound management	All	All	All	26,28,29,30	All	39,40,42,43,44,45,46,47,48,49,50,51	All
• Sport injury	All	All	21,22	26,28	33	43,44	53
• Traction	All	All	20,21,22	26	33	43	53
• Care of cast	All	All	21,22	26	33		53
• Infectious control	All	All	20,21,22,23,24	26		39	53
• General understanding on allied health services in Orthopaedics <ul style="list-style-type: none"> ▪ Physiotherapy ▪ Occupational therapy ▪ Prosthetic and Orthotic 	1,2,7,9,10		23,24,25				

Table 3 Matching of orthopaedic specific module to competence framework
(cont'd)

Subject areas	Domains						
	1	2	3	4	5	6	7
Advanced orthopaedic nursing practice							
• X-ray interpretation and radiographic investigation in orthopaedics	1,3,4,5,7	12,14,17			32	49	53
• Necrotizing fasciitis	All	All	20,22,23,24	26,28,30,31	32,33,34	39,42,44,49,51	53
• Musculoskeletal infection and management	All	All	20,22,23,24	26,30	32,33,34	39,42,44,49,51	53
• Microbiologist's perspectives in orthopaedic conditions	1,3,4,5,6,7,8,9,10		20	30		39	
• Updated traction, casting and bandaging technique	1,2,3,4,6,7,9,10,11	All	All	26,28,30	32,33,34	43,46,47,48,49,50	53
• Pain management for orthopaedic patients ▪ Nurses role in orthopaedics	All	All	22,23,24	28,29		44,45,46	53
• Advanced wound care in orthopaedics ▪ Different types of ulcers in orthopaedics ▪ General principles on ulcer care ▪ Nursing interventions and care of specific type of orthopaedic ulcer	All	All	All	26,28,29,30	32,33,34,37,38	39,40,42,43,44,45,46,47,48,49,50,51	All
• Common types of medication in orthopaedics ▪ Effect and side-effect ▪ Point of care for patients taking orthopaedic medication	3,5,6,7,8,9,10,11	All	22,23	28		44,45	53
• Day surgery service and specific care	2		20,21,22	30	32,36	41,44,45	
• Nurse-led pre-operative assessment	All	All	22,23	26,30	32,36,37,38	40,41,44,45,46,49	
Sub-specialty orthopaedic nursing practice in							
<i>Musculoskeletal tumors</i>							
• Knowledge of care patients with musculoskeletal tumors	All	All	20,22		33	44	53
• Musculoskeletal rehabilitation	All	All	20,22,23,24	26,28	32,33	44	53
• Psychosocial support	1,2,4,6,7,9,10,11	All	20,22,23,24	26	37,38	44	53
• Nutritional support	All	12,13,15,16,19	22	31	33	44	53

Table 3 Matching of orthopaedic specific module to competence framework
(cont'd)

Subject areas	Domains						
	1	2	3	4	5	6	7
Sub-specialty orthopaedic nursing practice in							
<i>Trauma</i>							
• Common mechanism of injuries		14,15, 18,19			32	39	53
• Relationship between the mechanism of injuries to the related bone and soft tissue trauma	All	All			32,33, 35	39	53
• The clinical features of hip fracture and other types of fracture					32	39	53
• Recognition the possible physiological and psychosocial problems of clients	All	All	20,22, 23,24	29	32,37, 38	39	53
• Appropriate nursing care and coordination	All	All	20,22, 23,24	26,28, 30,31	32,33, 37,38	39,42,43, 44,45,46, 49,50	53
• Pre-operative, post-operative and rehabilitative management strategy	All	All	20,22, 23,24	26,28, 30,31	32,33, 37,38	39,42,43, 44,45,46, 49,50	53
• Complication prevention	All	All	22	26,28, 30,31	32,33	42,43,44, 45,49,50	53
• Post-trauma associated pain control	All	All	22,23, 24,25	26,28	32,33	42,43, 44,45	53
• Geriatric care	All	All	20,21, 22,23	30	32,33	44,45	53
• Relevant patient education regarding patient's needs, understanding and ability	All	All	21,22, 23,24				53
• Osteoporosis and sarcopenia	All	All	20,21, 22,23	26,28, 30,31	32,33	42,43, 44,45	53
<i>Hand</i>							
• Anatomical structure and function of hand related to injury	2,4					39	53
• Common acute and non-acute hand injuries and related treatment modalities	All	All	20,22	26,28	32,33, 34,37, 38	39,42,43, 44,46, 49,50	53
• Comprehensive nursing assessment on hand	3,4,6, 7,9, 10,11				33,34, 37,38	44	53
• Traumatic micro-vascular surgery as well as related pre and post-operative nursing interventions	All	All	20,22, 23,24	26,28, 30,31	32,33	42,43,44, 46,47,48, 49,50	53
• Replantation surgery and specific post-operative care	All	All	20,22, 23,24	26,28, 30,31	32,33	42,43,44, 46,47,48, 49,50	53
• Potential complications and preventive measures	All	All	20,22, 23,24	26,28	32,33	44,46,47, 49,50	53
• Impact on hand injury/ problem to activity of daily living	All	All	20,22			47	53
• The role and treatment modalities of allied health colleagues on hand injury/ problem	1,2,3, 6,7, 9,10		20				
• Collaborate with other disciplines for better functional outcomes	1,2,3, 6,7, 9,10	All	20	31	35,36	47	53

Table 3 Matching of orthopaedic specific module to competence framework
(cont'd)

Subject areas	Domains						
	1	2	3	4	5	6	7
Sub-specialty orthopaedic nursing practice in (cont'd)							
<i>Foot and ankle</i>							
• Anatomical structure and function of foot related to injury	2,4					39	53
• Common congenital and acquired foot problem/ injury as well as related treatment modalities	All	All	20,22	26,28	32,33,34,37,38	39,42,43,44,46,49,50	53
• Foot circulation and structural defect assessment	3,4,6,7,9,10,11	12,13,16,19			33,34,37,38	44	53
• Prevention and emergency care on compartment syndrome	All	All	20,22	26,28	33,34	39,42,43,44,45	53
• Post-operative care on lower limb amputation	All	All	20,22,23,24	26,28,30,31	33,34,37,38	39,42,43,44,45,46,48,49,50	53,54
• Knowledge on different types of prosthesis and orthotics in enhancing patient's rehabilitation	1,2,3,4,6,7,9,10,11	All	20,22,23			48	53
• Gait assessment and impact to patient	1,2,3,4,6,7,9,10,11	All	20,22,23			48	53
• The role and treatment modalities of allied health colleagues on foot injury/ problem	1,2,3,6,7,9,10		20				
• Collaborate with other disciplines for better functional outcomes	1,2,3,6,7,9,10	All	20	31	35,36	47	53
<i>Spine</i>							
• Common spinal problem and related treatment modalities	All	All	20,22	26,28	32,33,34,37,38	39,42,43,44,46,49,50	53
• Motor and sensory spinal assessment	3,4,6,7,9,10,11	12,13,16,19			33,34,37,38	44	53
• Acute management of spinal cord injuries	All	All	20,22,23,24,25	26,28	32,33	39,42,44,45,46,48,49,50	53
• Overall concept on spinal rehabilitation and impact on activity of daily living	All	All	20,22			39,43,44,47,49,50	53
• Care on chronic low back pain and impact on patients	All	All	20,22,23,24			44,47	53

Table 3 Matching of orthopaedic specific module to competence framework
(cont'd)

Subject areas	Domains						
	1	2	3	4	5	6	7
Specialty orthopaedic nursing practice in (cont'd)							
<i>Total joint replacement</i>							
• Joint replacement surgery on lower limb and the related nursing implications	All	All	20	28,30	32,33	44,49	53
• Role of nurses in clinical pathway on joint replacement surgery	All	All	20,22,23,24,25	26,28,29,30,31	All	41,42,43,44,45,46,47,48,49,50	All
• Impact of rheumatological disease to joint degeneration	All	All	20,21,22	31		39,44,49	53
• Venous thromboembolism prevention and management in orthopaedics	All	All	All	26,28,30,31	32,33,34,37,38	39,40,42,43,44,45,46,49,50	All
<i>Sport injury</i>							
• Anatomical structure of shoulder, elbow, knee and ankle related to sport injury	2,4					39	53
• Principle of care on sport medicine and the nursing implications	All			28		44,45,49	53
• Acute management of knee and shoulder injuries related nursing care	All	All	22,23	26,28	32,33	44,45,49	53
• Physiotherapy perspective on sport rehabilitation and impact on nursing care	1,2,4,7	13,14,16,19					53
Elective advanced care management on orthopaedic in							
<i>Orthopaedic related tissue viability and soft tissue re-surfacing</i>							
• Anatomical structure of tendons, muscle and blood vessels related to the orthopaedic ulcer management	All			26,29,30,31		44,46,47,48,49,50,51	All
• Molecular pathology on orthopaedic tissue viability	All				32,33,34,37,38	43,44,45,46,47,48,49,50,51	All
• Clinical reasoning on intervention objective	All	All	20,22,23,24,25	26	All	40,43,44,45,46,47,48,49,50,51	All
• Topical intervention regarding molecular alternations	All		All	All	32,33,34,38	39,40,41,43,44,45,46,47,48,49,50,51	All
• Soft tissue viability management	All	All	All	26,28,29,30,31	32,33,34,38	40,41,43,44,45,46,47,48,49,50,51	All
• New conjunctive treatment in orthopaedic tissue viability	1,2,35,6,7,9,10,11	All	All	26,28,30	All	39,40,42,43,44,45,46,47,48,49,50,51	All

Table 3 Matching of orthopaedic specific module to competence framework
(cont'd)

Subject areas	Domains						
	1	2	3	4	5	6	7
Elective advanced care management on orthopaedic in (cont'd)							
<i>Trauma</i>							
• Pre-hospital and site management for orthopaedic patient	1,2,3,4,6,7,9	12,14,15,17,18,19	All	26	32	42,44	53
• Major trauma, polytrauma and pelvic fracture in orthopaedic patients	All	All	All	26,30,31	32,33,38	42,44,46,48,49,50	53
• Specific care on open fracture, and pelvic fracture	All	All	All	26,28,30,31	32,33,34	42,44,46,48,49,50	53
• Specific nursing assessment skills to traumatized patients and related documentation	All	All	22,23,24	26		44,45,46,49,50	53
• Interpretation of radiological findings	1,2,3,4,5,6,7					42,44,49	53
• Interpretation of abnormal laboratory findings	1,2,3,4,5,6,7,8					42,44,49	53
• Integration of clinical, radiological and laboratory findings into full clinical picture	All		22			42,44,49,50	53
• Correlation of all the findings to patient's needs and specific nursing care	All	All	20,22,23,24	30,31	32,33	42,44,49,50	53
<i>Paediatric orthopaedics</i>							
• Common congenital disorder on paediatric orthopaedics and the nursing impact	All	All	20,22,23,24	28,31	32,33,37,38	41,42,43,44,46,47,49,50	53
• Normal and abnormal radiological interpretation	All					44,46,47,48,49,50	53
• Pre-operative and post-operative care	All	All	20,21,22,23,24	26,28,30,31	32,33,34,37,38	39,41,43,44,46,48,49,50	All
• Latest development of related surgeries and the impact on nursing care development	1,2,3,4,7,9,10			26	32,33,37,38	42,43,33,45,46,48,49,50	53
• Rehabilitation and community care on post-surgery	All	All	All	26,28,31	32,33	40,42,43,43,45,46,48,49,50	53
• Psychosocial impact of the patient and family	1,2,3,4,6,7,9,10,11	All	20,22,23,24	29	32,33	44,45	53
• Developmental impact of paediatric patients	1,2,3,4,6,7,9,10,11	All	20,22,23,24		32,33	44,45	53

Table 3 Matching of orthopaedic specific module to competence framework (cont'd)

Subject areas	Domains						
	1	2	3	4	5	6	7
Elective advanced care management on orthopaedic in (cont'd)							
<i>Sport injury and nursing on related latest development</i>							
• Latest surgical development on shoulder/ knee injury and the nursing care development	1,2,3,4,6,7,9			26	32,33,37,38	42,43,33,45,46,48,49,50	53
• The use of ultrasound assessment on soft tissue injury in nursing	1,2,3,4,5,6,7,9,10,11	All	12,13,14,15,16,19	26,28,30,31	All	42,43,44,45,46,47,48,49,50	53
• The use of adjuvant therapy on soft tissue injury as well as related nursing care	1,2,3,4,5,6,7,9,10,11	All	12,13,14,15,16,19	26,28,29,30,31	All	42,43,44,45,46,47,48,49,50	53
• Sport injury on athletics and the nursing impact	All	All	All		32,33,37,43,37,38	42,43,44,45,48,49,50	53
<i>Fragility hip fracture</i>							
• Nursing role in fragility hip fracture pathway	All	All	All	All	All	39,40,41,42,43,44,45,46,47,48,49,50,51	All
• Specific nursing care regarding nursing quality indicators in fragility hip fracture	All	All	All	26,27,28,30,31	All	41,42,43,44,45,46,47,48,49,50,51	All
• Latest surgical development of fragility hip fracture and the impact to nursing care	1,2,3,4,6,7,9			26	32,33,37,38	42,43,33,45,46,48,49,50	53
• Elderly friendly model of care and fragility hip fracture in nursing	All	All	All	26,28,30,31	All	41,42,43,44,45,46,47,48,49,50,51	All
• Geriatrician and fragility hip fracture as well as the nursing impact	1,2,3,4,5,6,7,8,9,10	All	20,22,23,24,25	28,30,31		42,43,44,45,46,47,48,49,50	53
• The role of allied health and the impact to nursing development	1,2,4,7	13,14,16,19					53
• The discharge planning for patient after fragility hip fracture	1,2,3,4,6,7,8,9,10,11	All	All	26,30	All	44,45,46,47,48,49,50	All
<i>Handling difficult conditions on total joint replacement</i>							
• Care on joint replacement surgery on patient with multiple co-morbidities and the nursing impact	All	All	All	26,27,28,30,31	32,37	42,44,46,49,50	53
• Radiological assessment on joint replacement for nurses	1,2,3,4,6,7					42,44,49	53
• Community care and available resources on joint replacement	1,2,3,4,6,7,8,9,10,11	All	20,22,23,24			46,47,48,49,50	53
• Nurse-led clinic service on joint replacement	All	All	All	All	All	39,40,41,42,43,44,45,46,47,48,49,50,51	All
• Latest development on joint replacement service and impact to nursing	All	All	20,22,24	30	32,33,38	42,44,49	53

Table 3 Matching of orthopaedic specific module to competence framework (cont'd)

Subject areas	Domains						
	1	2	3	4	5	6	7
Elective advanced care management on orthopaedic sub-specialties in (cont'd)							
<i>Handling complex conditions on spinal problem</i>							
• Comprehensive neurological assessment and clinical variances in spinal nursing	1,2,3,4,5,6,7,9,10,11	All	20,22,23,24	26,30	33	44,45,46,48,49,50	53
• Specific individualized nursing care on spinal cord injuries	All	All	20,22,23,24	26,28,30,31	32,33,37,38	42,43,44,45,46,47,48,49,50	53
• Community resources on spinal cord injuries and the nursing impact	1,2,3,4,5,6,7,9,10,11	All	All		35,36	46,47,48,49,50	53
• The discharge planning of patients after spinal cord injuries	1,2,3,4,5,6,7,9,10,11	All	All	26,29	All	46,47,48,49,50,51	All
• Handling complex spinal rehabilitation in community	All	All	All	26,28	32,33,34,37,38	46,47,48,49,50,51	53
• Sexual rehabilitation on spinal cord injury	All	All	20,22,23,24			44,45,46,48,49,50	53
• Alternative therapies on low back pain	1,2,3,4,5,6,7,9,10,11	All	20,22			44,45	53

7. Academy ordinary member application

- Trainee has held a Master Degree in Nursing, in relation to health care, health service or orthopaedics and
- Trainee must complete the above 500 hours theory training and
- Trainee must complete 500 hours practicum in recognized training center (refer to "Orthopaedic Nursing Training – Clinical Log Book" for details) and
- Trainee must complete at least 80% of Module I - Basic Orthopaedic Nursing Training Log Book, 80% of Module II - Post-basic Orthopaedic Nursing Training Log Book

8. Academy fellow member application

- Trainee must complete Module III –80% of Advanced Orthopaedic sub-specialty Nursing Training Log Book

9. Recognized local master programs and Institutes

Program	Institutes
Master of Nursing	<ul style="list-style-type: none"> School of Nursing, The University of Hong Kong (HKU) School of Nursing, The Chinese University of Hong Kong (CUHK) School of Nursing, The Hong Kong Polytechnic University (HKPU)
Master of Nursing (Clinical Leadership)	<ul style="list-style-type: none"> Co-joint program - School of Continuing Education, Hong Kong Baptist University (HKBU) and Western Sydney University
Master of Public Health	<ul style="list-style-type: none"> School of Public Health, HKU School of Public Health and Primary Care, CUHK
Master in Primary Health Care	<ul style="list-style-type: none"> School of Continuing Education, HKBU
Master of Science in Geriatric Orthopaedics	<ul style="list-style-type: none"> Department of Orthopaedics and Traumatology, CUHK
Master of Science in Sports Medicine and Health Science	<ul style="list-style-type: none"> Department of Orthopaedics and Traumatology, CUHK
Master of Science in Musculoskeletal Medicine and Rehabilitation	<ul style="list-style-type: none"> Department of Orthopaedics and Traumatology, CUHK
Master of Science in Health Promotion and Behavioral Health	<ul style="list-style-type: none"> School of Public Health and Primary Care, CUHK
Master of Science in Epidemiology and Biostatistics	<ul style="list-style-type: none"> School of Public Health and Primary Care, CUHK
Master of Science in Health Service Management	<ul style="list-style-type: none"> School of Public Health and Primary Care, CUHK HKU SPACE

Remarks

The list of programs and institutions are not exhaustive and trainee should submit program details to College for vetting beforehand

10. Reference

The Hong Kong Academy of Nursing (2015). *Guidelines for Program Planning and Examination*. Available online at

<http://www.hkan.hk/main/hk/publications/guidelines-for-program-planning-and-examination> Retrieved on 23 April 2017.

CURRICULA AND CLINICAL LOG BOOK

Clinical Log Book (Clinical Practicum)

1. General instructions and guidelines for mentors and mentees

1.1. Objective of the Log Book

The purposes of the clinical log book from the Hong Kong College of Orthopaedic training (HKCON) are as follows.

- To assist the trainee in reflecting the learning opportunities in clinical practices required by the certification program
- To facilitate the trainee to assess the clinical competence, provide support and guidance to accomplish the certification program

1.2. Learning outcomes of the training program in clinical practicum

By the end of the whole training program in orthopedics, trainees are required to demonstrate competence in the following areas.

- Clinical assessment of orthopaedic patients including valid and specific assessment tools and measures
- Prioritize the care needs of a group of orthopaedic patients
- Execute evidence based patient care and management of acute conditions / emergency situations within the specialty
- Evaluate the quality of evidence/research to underpin orthopaedic nursing care, treatment and management
- Apply evidence-based treatment, management and rehabilitation of orthopaedic patients
- Use evidence-based, holistic patient-centered care for orthopaedic patients and their families
- Use evidence-based patient information and education of patients and their family/informal carers
- Establish effective therapeutic relationships with patients and their significant others

- Identify the risk/harm to patients and implementation of appropriate interventions to minimize risk/harm
- Optimize successful inter-professional working in orthopaedic settings
- Participate in clinical audits, research and quality improvement programs
- Educate and mentor non-specialist nurses, health care assistants and students in orthopaedic settings
- Conduct health promotion and disease prevention related to MSK system

1.3. Advanced Practice Nurse (APN) training in orthopaedics

There are three modules, which make up the content of APN training in orthopaedics, ranging from basic, post-basic orthopaedic to advanced orthopaedic sub-specialty nurse training.

Module I – Basic Orthopaedic Nurse Training

Module II – Post-basic Orthopaedic Nurse Training

Module III – Advanced Orthopaedic Sub-Specialty Nurse Training

1.4. Level of competence

In order to assist trainees in achieving their competences, a nine-level of competence is adopted from the Scottish Government Workforce Directorate “Guidance to NHS Boards on the Career Framework for Health” (Scottish Government, 2009).

The Academy Members are expected to have mastery performance at Level 6 and demonstrable attributes at Level 7.

The Academy Fellows are expected to have mastery performance at Level 7 and demonstrable attributes at Level 8.

Level	Reference title	Level attributes
9	Director	People at Level 9 apply advanced and highly developed theoretical and practical knowledge over a wide range of clinical, scientific, technical and/or management functions.
8	Consultant	People at level 8 of the career framework require highly specialized knowledge, some of which is at the forefront of knowledge in a field of work, which they use as the basis for original thinking and/or research. They are leaders with considerable responsibility, and the ability to research and analyze complex process. They have responsibility for service improvement. They may have considerable management responsibilities and be accountable for service delivery or have a leading education or commissioning role.
7	Advanced practitioner	People at level 7 of the career framework have a critical awareness of knowledge issues in the field and at the interface between different fields. They are innovative, and have a responsibility for developing and changing practice and/ or services in a complex and unpredictable environment.
6	Specialist/ Senior practitioner	People at this level require a critical understanding of detailed theoretical and practical knowledge, are specialist and /or have management and leadership responsibilities. They demonstrate initiative and are creative in finding solutions to problems. They have some responsibility for team performance and service development and they consistently undertake self-development.

1.5. Key domains of the competence framework for APN in Orthopaedics

Domain 1	Managing clients with complex health conditions
Domain 2	Enhancing therapeutic nurse-client relationship
Domain 3	Demonstrating effective leadership and team work
Domain 4	Enhancing quality assurance and improvement
Domain 5	Managing and negotiating innovative and effective approaches to care delivery
Domain 6	Enhancing professional attributes of general and practice
Domain 7	Enhancing personal attributes

1.6. General instruction of the trainee

There are separate sections of the record for each module of training. Trainee is strongly advised to carry the log book at all times and to enter the required information on a daily basis. Logging should be started early in the training period until passing the Fellow Exit Assessment of HKCON. This information is taken for reference at various stages of training assessment. If trainee has problems or queries on using the log book, he/ she are advised to consult their respective mentors or the Education Committee members of HKCON. In addition, the trainee should regularly read and access information related to Specialty Training published by the HKCON as updated on website.

1.7. Responsibility of the trainee

- Trainees are expected to take the responsibility for their own professional development. They are required to evaluate their own strengths, weaknesses and identify areas of improvement.
- Each trainee, upon enrollment, will be issued with the Clinical Log Book at the commencement of Advanced Practice Nursing (Orthopaedics) Certification Program training. The Clinical Log Book is the property of the trainee.
- The trainee should record the followings:
 - All supervised assessment on the patients
 - All supervised interventions on the patients
 - All special encounters with the patients/families
 - Case conferences/ nurses rounds/ research activity that facilitate change and adopt evidence-based practice in nursing care
 - Participation in activities that lead to maintain safe patient environment and initiate improvement strategies in quality and risk management

The above list is not exhaustive as the Log Book serves as a means that demonstrate reflective learning of the trainee

- The trainee is strongly advised to keep the Log Book with him/her at all times and to fill in relevant information on a regular basis. Patient(s) MUST NOT be identified by names or Hong Kong Identity Card numbers. Cases should be recorded using patients' initials and/or hospital numbers.

- The trainee should discuss his/ her progress as documented in the Log Book with his/her mentor at regular intervals. The signature of the Mentor is the evidence that the mentor is satisfied with the trainee's performance.
- The trainee should seek the mentor's endorsement of the training program before she/he is qualified to sit for the Membership Examination of Advanced Practice Nursing (Orthopaedics) Certification Program.
- The trainee should complete at least 80% of the Log Book (fulfill the mandatory items) before final assessment.
- The trainee entering the HKCON training program should complete the log book and submit to the college for the ordinary membership examination as well as presented for fellow exit assessment.

1.8. Responsibility of the Mentor

- The mentor facilitates the trainee to map learning opportunities in the clinical practices to the competence framework and evaluate their progress
- The mentor has the responsibility to guide the trainee to reflect on encounters in the clinical areas by asking what is happening, why and what the learning points are.
- The mentor is to facilitate the trainee to identify opportunities to develop the leadership abilities to lead the team.
- The mentor should verify specified areas of competence of the trainees as they are attained.
- The mentor is to polish the trainee's presentation and writing skills and encourage him/ her to present cases and papers.
- The mentor is to encourage the trainee to be active team player in clinical rounds.
- The mentor should not take more than three trainees at the same work place.
- The mentor should not hold mentor status in more than two specialties.
- The mentor has the responsibility to guide the trainee to prepare for the training program.

1.9. Abbreviation lists

APN	Advanced Practice Nurse
DOM	Department Operation Manager
NC	Nurse Consultant
NO	Nursing Officer
NS	Nursing Specialist
RN	Registered Nurse
WM	Ward Manager

2.0. Approved clinical attachment centers

Clinical Institute	Name of Chief Mentors
AHNH	LO Ka Man Carmen, APN
CMC	Wong Oi Lin, Irene, WM
KWH	Lau Wing Kuen, WM
NDH	Li Yuk Ngan, WM
PMH	CHAN Lai Han Maggie, WM
PWH	Tsang Wing Yan, APN
PYNEH	Anthony Cheng, NC
QEH	K K Tsang, NC
QMH	S H Lee, APN
TKOH	M Y Poon, WM
TMH	S L Wan, NC
UCH	Wong Chun Kwan WM
YCH	Esther Chang, APN

2.1. Personal data of trainee

Trainee's Name _____ Sex _____

Chinese Name _____

Associate Member Registration Number _____

Date of Entry into the Training Program _____

Address _____

Email _____ Telephone _____

2.2. Clinical Attachment Centers

Module	Clinical Institute	Unit	Name of Mentors	Date of Clinical Attachment	
				From	To

A. Sample of logbook

Module I

Basic Orthopaedic Nurse Training

2. Module I – Basic Orthopaedic Nurse Training (BONT)

2.1. Entry for Basic Orthopaedic Nurse Training

The aim of Basic Orthopaedic Nurse Training is to prepare a registered nurse who is interested and would like to further develop their career in Orthopaedic Nursing. Successful completion of this module is a pre-requisite for the trainee to proceed to post-basic orthopaedic nurse training. The entry requirement for BONT includes

- Degree holder with a minimum of 2 years' post-registration experience and
- Trainees are **Associate Members** of the Hong Kong College of Orthopaedic Nursing (HKCON)

2.2. Completion of Module I

Trainees for Orthopaedic Basic Nursing Training would have to complete the following specific topics within a period of two years.

- Trainee will be given a Logbook issued by HKCON when they enroll as associate members of the College. At least 80% of the items listed in the logbook must be signed by a College Registered Mentor in a College accredited center (The practicum in this period can also be recognized if the time is endorsed by HKCON mentor.)
- The performance of each trainee will be assessed on her / his selected clinical attachment for which he / she has registered. The assessment may be in the form of continuous assessment.
- It is expected the trainee will complete BONT within a period of two years. Trainees can apply for training period extension if there are mitigating circumstances. At that point, the case will be considered by HKCON on a case by case basis.

2.3. Learning outcomes

- To apply knowledge of the musculoskeletal system to patient care
- To use effective communication skills and excellent customer care skills
- To possess sufficient understanding of musculoskeletal conditions, surgery and injuries to safely care for a patient independently
- To demonstrate skills and competence in caring for patients in the pre-operative and post-operative stage

2.4. Clinical Attachment Evaluation

Trainees are expected to take the responsibility for their own professional development. They are required to evaluate their own strengths, weaknesses and identify areas of improvement. Mentors provide trainees with guidance on their practice and evaluation of their progress.

Trainees are expected to perform at least “level 6 attributes”.

Competency Area	Date of Satisfactory Practice	Trainee's signature	Mentor's signature	Remarks
1. Mobilization & Orthosis				
The correct turning of spinal injury patients				
• Log Roll Turning				
The correct methods of mobilization in accordance with patient's condition				
• Different types of weight bearing including non-weight, partial-weight and full-weight				
• Different types of walking method including touch down and heel walking				
Splint, brace and orthosis care				
• Splint care (e.g. extension splint, resting splint, static & dynamic splint, crock-up splint, Gutter splint)				
• Brace care (e.g. SOMI, knee)				
• Orthosis care (e.g. SOMI, AFO, foam support, abduction pillow, leg rest)				
2. Traction system				
• Skin traction (e.g. Halter traction, pelvic traction)				
• Portable traction splint				
• Skeletal traction (e.g. High Braun frame, BBSS, Halo traction)				
3. Wound care				
• Application of various dressing materials (e.g. silver dressing, alginate, negative pressure dressing)				
• Pin site care (e.g. traction pin, K-wire)				
• Drain care and management				

Competency Area	Date of Satisfactory Practice	Trainee's signature	Mentor's signature	Remarks
3. Wound care (cont'd)				
Central Line care (e.g. Hickman Line, CVP)				
Specific management of amputated part and amputee				
Bandage methods (e.g. swelling control, stump bandaging)				
Correct selection of tubular bandage including tubinette, tubifast and tubigrip				
4. Orthopaedic pre-operative care				
Psychological preparation e.g. health education (use of Fact Sheet) & others				
Skin preparation according to local practice				
Bowel preparation according to local guidelines				
Anesthesia Preparation – local/spinal/regional and general				
Pre-operative workup (e.g. blood tests, ECG, CXR, etc.)				
Preparation prior to operation (e.g. abduction pillow)				
Adherence to safe fasting practice				
5. Orthopaedic post-operative care				
Focus observation e.g. vital signs, conscious level and prompt recognition of deterioration with appropriate actions				
Condition of wound and related management				
Drain site & drainage output				
Pain management				
<ul style="list-style-type: none"> Regular pain assessment by the use validated tools 				
<ul style="list-style-type: none"> Ability to recognize pain in those patients with impaired cognitive function or communication difficulty 				
<ul style="list-style-type: none"> Patient Control Anaesthesia (PCA) 				
<ul style="list-style-type: none"> Epidural Anaesthesia 				

Competency Area	Date of Satisfactory Practice	Trainee's signature	Mentor's signature	Remarks
5. Orthopaedic post-operative care (cont'd)				
Pain management (cont'd)				
• Peripheral Nerve Block				
• Oral and intramuscular pain control medication administration				
• Intramuscular injection/ Intravenous infusion				
Measure to minimize complications				
• Correct application of anti-embolic stockings, pneumatic pump and/ or medication if indicated				
• Selection of appropriate pressure relieving mattress				
• Breathing and coughing exercise				
6. Handling of emergency situations				
Haemorrhage				
Compartment syndrome				
Deep vein thrombosis				
Pulmonary embolism				
Fat embolism				
7. Demonstrate applied knowledge of the ward/ departmental administrative procedures				
Ordering and checking of				
• Items of dispensary trolley				
• Top up system				
• Dangerous/ controlled drugs				
• Emergency trolley				
Compliant management				
Repair & maintenance of the equipment in wards				
Transportation system				

Competency Area	Date of Satisfactory Practice	Trainee's signature	Mentor's signature	Remarks
8. Obtain patient history and perform nursing care plan				
Focused history taking				
Care planning according to local practice				
9. Demonstrate managerial skills in providing patient care				
Prioritize nursing care effectively and efficiently according to patient's need and ward situation				
Demonstrate effective skills in optimal use of resources				
Demonstrate effective collaboration with other colleagues in providing high quality client-centered service for patients				
Able to promptly recognize, report and manage any risks to patient safety e.g. low staff/patient ratio				
10. Legal Aspect in Nursing Practice				
Demonstrate knowledge of policies & procedures that have legal implications for practice				
DNR procedure				
Understand legal requirements of consent/assent, protection of vulnerable adults or children				
11. Ethical Aspect in Nursing Practice				
Ensure privacy and security for patients' data				
Ensure patient's right preserved				
Respect patient autonomy and right to confidentiality				
12. Effective communication and documentation				
Communicate effectively with individuals or groups (verbal and written)				
Communicate effectively with other members of health care team				

Competency Area	Date of Satisfactory Practice	Trainee's signature	Mentor's signature	Remarks
12. Effective communication and documentation (cont'd)				
Demonstrate problem solving approach in documenting relevant information				
Maintain an adequate & accurate documentation of all nursing activities				
13. Management of Violence				
Demonstrate ability to handle patient actual or potential aggressive or violent behavior				
Suicidal precaution				
14. Management of patients with infectious diseases				
Universal precautions, correct use of protective clothing, gloves, isolation procedures, infection screening according to local guideline				
Reverse precautions- barrier nursing				
15. Resuscitation Training				
Basic Cardiac Life Supports				
16. Nursing Standard & Audit				
Wound assessment accuracy				
Medication administration (oral, IV)				
Pain assessment accuracy and management according to local guideline				
17. Incident / accident reporting				
Demonstrate compliance with local incident/accident reporting				
Promptly identify and manage potential risks and hazards				

Competency Area	Date of Satisfactory Practice	Trainee's signature	Mentor's signature	Remarks
18. Crisis Management				
Missing patient				
Major incident policy				
19. Health Information System				
Patient Assessment Form				
Dashboard				
Nursing Discharge Summary				
Referral system				
In-patient Medication Order Entry (IPMOE)				

2.5. Evaluation Sheet in Clinical Attachment

Evaluation Sheet A – Periodical Evaluation Record (To be completed by Mentor and Trainee before transfer to other unit)

Clinical Institute 1: _____

Ward / Unit / Department: _____

Evaluation

Mentor

Trainee

Signature of Trainee: _____ Date: _____

Signature of Mentor: _____ Date: _____

(Additional sheet is required to attach where appropriate)

Clinical Institute 2: _____

Ward / Unit / Department: _____

Evaluation

Mentor

Trainee

Signature of Mentor: _____ Date: _____

Clinical Institute 3: _____

Ward / Unit / Department: _____

Evaluation

Mentor

Trainee

Signature of Trainee: _____ Date: _____

Signature of Mentor: _____ Date: _____

Evaluation Sheet B – Summary Evaluation Record (To be completed by Nurse Supervisor – NO / APN/ WM / NS / DOM / NC; Mentor and Trainee before transfer to clinical Department)

Ward: _____

Specialty: _____

Training Period: from _____ to _____

Date	Trainee's Feedback	Name and Signature of Trainee

Date	Mentor's Feedback	Name and Signature of Mentor

Date	Nurse Supervisor's Feedback (NO / APN /WM / NS / DOM / NC)	Nurse Supervisor	
		Name and Signature	Rank

Countersigned by DOM / Unit Head:

_____ (Name and Signature)

Date: _____

Module II

Post-basic Orthopaedic Nursing Training

3. Module II – Post-basic Orthopaedic Nursing Training (PBONT)

3.1. Entry for Post-basic Orthopaedic Nursing Training

Upon the completion of BONT, candidates are eligible to join PBONT within four to six years period.

3.2. Completion of Module II

After fulfilling all the required assessment of PBONT, trainees are eligible to proceed to Module III.

3.3. Learning outcomes for Post-basic Orthopaedic Nursing Training

Upon completion of the clinical attachment, candidates are able to

- 3.3.1. Identify the anatomical and pathological changes of the musculoskeletal system (**Domain 1, 2, 4, 5, 6**)
- 3.3.2. Describe the common orthopaedic problems and the common mechanism of injuries (**Domain 1, 2, 4, 5, 6**)
- 3.3.3. Understand the clinical signs and symptoms of common musculoskeletal pathological changes and injuries (**Domain 1, 2, 4, 5, 6**)
- 3.3.4. Understand the radiographic investigation and integrate the understanding into daily practice e.g. X-ray, CT, MRI (**Domain 1, 2, 4, 5, 6**)
- 3.3.5. List and outline the latest medical and nursing management and apply evidence-based practice effectively to patients with musculoskeletal disorders (**Domain 1, 2, 3, 4, 5, 6, 7**)
- 3.3.6. Conduct specific nursing assessment skills to orthopaedic clients and documentation of assessment findings (**Domain 1, 2, 4, 5, 6**)
- 3.3.7. Perform pre-operative assessment and screening (**Domain 1, 2, 4, 5, 6**)
- 3.3.8. Plan the nursing care to patients based on the integration of assessment findings and applied knowledge (**Domain 1, 2, 4, 5, 6**)
- 3.3.9. Perform post-operative physical assessment and intervention as well as identify the potential post-operative complications (**Domain 1, 2, 4, 5, 6**)

- 3.3.10. Identify preventive measures for clients at risk and initiate interventions in a timely manner and evaluate the effectiveness of interventions appropriately *(Domain 1, 2, 4, 5, 6)*
- 3.3.11. Enact competence in providing holistic care through a multidisciplinary approach *(Domain 1, 2, 4, 5, 6)*
- 3.3.12. Implement evidence based practice in promoting patient's outcomes *(Domain 1, 2, 4, 5, 6, 7)*
- 3.3.13. Collaborate with other disciplines in enhancing the functional outcome of patients *(Domain 1, 2, 4, 5, 6)*
- 3.3.14. Identify client's learning needs based on his / her level of understanding and ability to learn, and initiate relevant education *(Domain 1, 2, 4, 5, 6)*
- 3.3.15. Distinguish the use of different orthoses in enhancing patient's rehabilitation *(Domain 1, 2, 4, 5, 6)*
- 3.3.16. Understand the common drugs used in musculoskeletal disorders and their action as well as adverse reaction *(Domain 1, 2, 4, 5)*
- 3.3.17. Act as a resource person to other nursing staff *(Domain 1, 2, 3, 4, 5, 6, 7)*
- 3.3.18. Applies occupational safety knowledge into practice in Orthopaedic environments *(Domain 3, 4, 5, 6, 7)*
- 3.3.19. Correlate and integrate the knowledge of infection control and prevention to Orthopaedic environments *(Domain 3, 4, 5, 6, 7)*

3.4. Clinical Attachment Evaluation

Trainees are expected to take responsibility for their own professional development. They are required to evaluate their own strengths, weaknesses and identify areas of improvement. Mentors provide trainees with guidance on their practice and evaluation of their progress.

Trainees are expected to perform at least “level 7 attributes”.

Competency Area	Date of Satisfactory Practice	Trainee's signature	Mentor's signature	Remarks
I. Functional Competency				
1. Therapeutic and Caring Relationships Establish partnership with clients to promote their wellness in the caring process, understand the past and present medical problem as well as social, psychological and emotional status				
1.1	Demonstrate knowledge and skills in patient assessment according local structure assessment framework			
	• Reason for admission/ chief complaint			
	• Physical examination			
	• Social and past medical history			
	• Risk assessment			
	• Emotion/ psychological status			
	• Mobility/ self-care ability			
	• Pain assessment			
2. Nursing Assessment, Specific knowledge and Skill application in the caring process Application of definite knowledge, skills and technology in the client caring process through structured approaches in various orthopaedic sub-specialties				
2.1 Sub-specialty: Trauma				
	Demonstrate an accurate assessment and care to patients with trauma			
	• Fracture hip			
	• Pelvic fracture			
	• Long bone fracture (e.g. fracture tibia and fibula)			
	Demonstrate accurate assessment of compartment syndrome, and intervene in an appropriate and timely manner			

Competency Area	Date of Satisfactory Practice	Trainee's signature	Mentor's signature	Remarks
2.1 Sub-specialty: Trauma (cont'd)				
Demonstrate safe and correct method for swelling control over limbs				
Demonstrate effective care for patient with amputation and using prosthetic devices				
Demonstrate accurate assessment of patient at risk for or experiencing a VTE, and intervenes in an appropriate and timely manner				
Demonstrate accurate assessment of a patient at risk for or experiencing a fat embolism, and intervenes in an appropriate and timely manner				
2.2 Sub-specialty: Hand				
Demonstrate safe, accurate assessment and care of patient after replantation and revascularization				
Demonstrate accurate and effective assessment care of patients with flexor and extensor tendon injury				
2.3 Sub-specialty: Foot and ankle				
For patient with diabetic foot related problems (without foot ulcer), demonstrate effective and appropriate care				
Demonstrate knowledge and skills in assessing and performing foot ulcer management in				
<ul style="list-style-type: none"> • Diabetic foot ulcer 				
<ul style="list-style-type: none"> • Chronic venous ulcer 				
Demonstrate accurate assessment and intervention of a patient experiencing				
<ul style="list-style-type: none"> • Soft tissue infection 				
<ul style="list-style-type: none"> • Infected chronic ulcer 				
<ul style="list-style-type: none"> • Osteomyelitis 				
Demonstrate knowledge and skills in assessment and management of pressure injury				

Competency Area		Date of Satisfactory Practice	Trainee's signature	Mentor's signature	Remarks
2.4	Sub-specialty: Spine				
	Demonstrate the ability to lead a safe and effective log-roll turning for a patient with spinal injury				
	Demonstrate safe, accurate assessment and care of the patient in Halo traction and vest				
	Demonstrate an safe and effective care for a patient after elective spinal surgery				
	Demonstrate an safe and effective care for a patient with spinal cord injury				
2.5	Sub-specialty: Total joint replacement				
	Demonstrate safe, accurate assessment and care of the patient including				
	• Total knee arthroplasty (TKA),				
	• Total hip arthroplasty (THA)				
	• Preventing and manage related post-operative complications				
2.6	Sub-specialty: Sport				
	Demonstrate accurate assessment and interventions of patient with acute sport injury				
	• Shoulder				
	• Knee				
	• Foot and Ankle				
	Demonstrate accurate assessment and effective interventions on swelling control after patient has sport injury				
	Demonstrate safe and effective post-operative care of patient having				
	• Rotator Cuff Repair				
	• Bankart repair				
	• Anterior Cruciate Ligament (ACL) Reconstruction				
	• Achilles Tendon Repair				

Competency Area	Date of Satisfactory Practice	Trainee's signature	Mentor's signature	Remarks
2.7	Sub-specialty: Musculoskeletal Tumors (only applicable for those tumor centres)			
	For patients with malignant tumor , the following care should be demonstrated in safe and effective manner			
	<ul style="list-style-type: none"> Emotional distress and behavioural disturbances 			
	<ul style="list-style-type: none"> Wide excision 			
	<ul style="list-style-type: none"> Flap surgery 			
	Demonstrate an accurate assessment and effective care on patient with			
	<ul style="list-style-type: none"> Fungating wound 			
	<ul style="list-style-type: none"> Radiotherapy wound 			
	<ul style="list-style-type: none"> Post-operative wound complications 			
3.	Quality and Risk Management			
	Maintain and promote a quality service environment and systems to maintain and enhance standards of care			
3.1	Maintain an environment and climate conducive to positive patient outcomes and workplace safety			
3.2	Initiate/ Implement quality improvement strategies and measures			
3.3	Monitor existing practice to ensure they are safety practice to patient			
3.4	Manage complaints and identify areas for improvement			
4.	Operations and Resources Management			
	Optimize the effectiveness on using resources to facilitate the provision of accessible, effective and efficient service/ care			
	Facilitate the planning and management of budgets, and equipment in adherence the guidelines			
4.1	<ul style="list-style-type: none"> Operational guidelines 			
	<ul style="list-style-type: none"> Infection control guidelines 			
	<ul style="list-style-type: none"> Clinical practice guidelines 			
4.2	Monitor and control optimal utilization of resources for efficient operation of a ward / unit			
4.3	Support manpower planning to ensure smooth service operations			
4.4	Provide feedback and coaching to colleagues to enhance performance			
4.5	Elicit feedback from service users regarding satisfaction with services provided			

II Personal Competency					
Competency Area		Date of Satisfactory Practice	Trainee's signature	Mentor's signature	Remarks
5. Personal Qualities Demonstrate the qualities and characteristics of a reliable and responsible person required in fulfilling the nursing duties					
5.1	Demonstrate effective communication skills and be able to exert influence in a group				
5.2	Analyze situation critically and execute with professional judgment				
5.3	Share clinical experience and knowledge with colleagues				
5.4	Evaluate own practice and enhance own nursing knowledge				
6 Professional Attribute Demonstrate the commitment to strive for excellence in providing holistic care services, and safeguarding good practice.					
6.1	Act as a resource person on area(s) of orthopaedic care nursing				
6.2	Participate in specialty specific professional activities				
6.3	Assist orthopaedic clients to make informed decisions				
6.4	Collaborate with other members of the health care team in decision making				
6.5	Recognize the role of members of the health care team in the delivery of health care				
III People & Team Competency					
7. Teamwork Contribute to the effective functioning of team(s)					
7.1	Foster a caring and supportive culture within a team				
7.2	Facilitate team collaboration				
7.3	Proactive participate into the multi-disciplinary team				
7.4	Awareness of and liaison with community resources such as community rehabilitation networks and support groups				
7.5	Provide professional support to community/carer groups and projects relevant to the specialty				

Competency Area	Date of Satisfactory Practice	Trainee's signature	Mentor's signature	Remarks
III People & Team Competency (cont'd)				
8. People Development Cultivating a supportive and participatory environment for enhancing staff development				
8.1	Empower colleagues / staff to assume responsibilities for client care with delegation, support and supervision			
8.2	Evaluate the process and outcome of duty delegation to colleagues/ staff			
9. Service Development				
9.1	Initiate and evaluate changes to service/care provision based on sound evidence and/or policy and guidelines			
9.2	Lead health educational and health promotional activities			
10. Legal and Ethical Practice Demonstrate knowledge and skills to ensure the protection of individual clients and the community as well as accountability to the public				
10.1	Provide information to enable patients, their carers or families on the choice of treatment / care			
10.2	Follow ethical practice			
10.3	Fulfill legal and professional responsibilities in accordance with national and local legislation			
IV Additional Competencies & Behavioral Indicators' (As agreed between trainee and mentor)				

3.5. Evaluation Sheet in Clinical Attachment

Evaluation Sheet A - Periodical Evaluation Record (To be completed by Mentor / Supervisor and Trainee before transfer to other unit)

Clinical Institute 1: _____

Ward / Unit / Department: _____

Evaluation

Mentor

Trainee

Signature of Trainee: _____ Date: _____

Signature of Mentor: _____ Date: _____

(Additional sheet is required to attach where appropriate)

Clinical Institute 2: _____

Ward / Unit / Department: _____

Evaluation

Mentor

Trainee

Signature of Trainee: _____ Date: _____

Signature of Mentor: _____ Date: _____

Clinical Institute 3: _____

Ward / Unit / Department: _____

Evaluation

Mentor

Trainee

Signature of Trainee: _____ Date: _____

Signature of Mentor: _____ Date: _____

Evaluation Sheet B – Summary Evaluation Record (To be completed by Nurse Supervisor
 – NO / APN/ WM / NS / DOM / NC)

Ward: _____

Specialty: _____

Training Period: from _____ to _____

Date	Trainee's Feedback	Name and Signature of Trainee

Date	Mentor's Feedback	Name and Signature of Mentor

Date	Nurse Supervisor's Feedback (NO / APN /WM / NS / DOM / NC)	Nurse Supervisor	
		Name and Signature	Rank

Countersigned by DOM / Unit Head:

_____ (Name and Signature)

Date: _____

Module III

Advanced Orthopaedic Sub-specialty Nursing Training

4. Module III – Advanced Orthopaedic Sub-specialty Nursing Training (AOSNT)

4.1. Entry for Advanced Orthopaedic Sub-specialty Nursing Training

Upon the completion of PBONT training and passing the membership examination, candidates are eligible to join AOSNT within a three years period.

4.2. Completion of Module III

After fulfilling all the required assessment of AOSNT, trainees are eligible to proceed to viva examination.

4.3. Learning outcomes for Post-basic Orthopaedic Nursing Training

Upon completion of the clinical attachment, candidates are able to:

- 4.3.1. Interpret and integrate all the findings of patient assessment including physical, laboratory and radiological findings (*Domain 1, 2, 4, 5, 6*)
- 4.3.2. Integrate and apply all knowledge and skills from modules I & II into the specialized care environment (*Domain 1, 2, 4, 5, 6*)

4.4. Record of practice (*Mandatory)

Trainees are expected to take responsibility for their own professional development. They are required to evaluate their own strengths, weaknesses and identify areas requiring improvement. Mentors provide trainees with guidance on their practice and evaluation of their progress.

Both trainee and mentor are expected to work in the same department. Trainee should demonstrate all the physical assessment skills, interpretation of radiological and laboratory findings in front of the corresponding mentor. All case studies, which are completed by trainee, should discuss with mentor before submission. They are expected to perform “level 7 to 8 attributes”.

Competency Area		Date of Satisfactory Practice	Trainee's signature	Mentor's signature	Remarks
1	Physical assessment*				
1.1	Spinal assessment				
	<ul style="list-style-type: none"> • Observation/inspection of the spine, noting any spinal deformity, protrusions, swellings, symmetry/asymmetry 				
	<ul style="list-style-type: none"> • Palpation and percussion of the spine 				
	<ul style="list-style-type: none"> • Gait assessment 				
	<ul style="list-style-type: none"> • Dermatome assessment according to American Spinal Injury Association (ASIA) classification 				
	<ul style="list-style-type: none"> • Myotome assessment according to ASIA classification 				
	<ul style="list-style-type: none"> • Finger escape test 				
	<ul style="list-style-type: none"> • 10 second test 				
	<ul style="list-style-type: none"> • Hoffman test 				
	<ul style="list-style-type: none"> • Spinal shock 				
	<ul style="list-style-type: none"> • Autonomic dysreflexia 				
1.2	Shoulder, elbow and wrist assessment				
	<ul style="list-style-type: none"> • Observation, inspection & palpation 				
	<ul style="list-style-type: none"> • Passive and active ROM 				
	<ul style="list-style-type: none"> • Neer's test 				
	<ul style="list-style-type: none"> • Hawkin's test 				
	<ul style="list-style-type: none"> • Drop-arm test 				
	<ul style="list-style-type: none"> • Apprehension test 				

Competency Area		Date of Satisfactory Practice	Trainee's signature	Mentor's signature	Remarks
1.3	Hand assessment				
	• Observation, inspection, palpation and ROM				
	• General vascular and sensory assessment				
	• Phalen's test				
	• Tinel's sign				
	• Scaphoid shift test				
	• 2-point discrimination				
1.4	Knee assessment				
	• Inspection and palpation				
	• Active and passive ROM				
	• Lachman test				
	• McMurray test				
	• Anterior drawer test				
	• Posterior drawer test				
1.5	Foot and ankle assessment				
	• Simmond's test				
	• Anterior drawer test				
	• Ankle brachial index/ toe brachial index				
1.6	Others				
	Hip assessment				
	• Active and passive ROM				

2 Interpretation of radiological findings*					
2.1.	X-ray - Identify fracture and problems in fracture healing such as mal-union, non-union				
	• Simple fracture				
	• Crack fracture				
	• Spiral fracture				
	• Comminuted fracture				
	• Intra-articular fracture				
	• Extra-articular fracture				
	• Osteomyelitis				
	• Osteoarthritis				
	• Osteopenia				
	• Loosening of prosthesis				
2.2	CT - Interpret the radiological report				
	• Stress fracture on spine				
	• Comminuted fracture				
	• Intra-articular fracture				
3 Interpretation of laboratory findings*					
3.1	Bone/ soft tissue infection				
3.2	Osteoporosis				
3.3	Serum level of inflammatory markers				

4	<p>Case illustration (Integration of all assessment knowledge/ skills and demonstrate their application to specialized orthopaedic care)</p> <ul style="list-style-type: none"> • Trainee should select at least five specialties for case studies and three of them should be the mandatory specialties (*) • In each selected specialty, a case should be prepared and presented to your corresponding mentor according to the “domain 1” of the “key domains of the competence framework for APN in Orthopaedics” • For domain 2 to 7, please illustrate case example accordingly
4.1	<p>Domain 1 Managing clients with complex health conditions</p>
4.11	<p>Sub-specialty: Trauma*</p>
	<p>Case illustration</p> <p><i>Write a complicated case you have encountered during the period of clinical practicum. Please describe your nursing process (assessment, diagnosis, planning, implementation and Evaluation) and collaboration with the other healthcare professions / teams.</i></p>

4.1	Domain 1 Managing clients with complex health conditions (cont'd)
4.12	Sub-specialty: Spine*
	<p>Case illustration</p> <p><i>Write a complicated case you have encountered during the period of clinical practicum. Please describe your nursing process (assessment, diagnosis, planning, implementation and Evaluation) and collaboration with the other healthcare professions / teams.</i></p>

4.1	Domain 1 Managing clients with complex health conditions (cont'd)
4.13	Sub-specialty: Total joint arthroplasty*
	<p>Case illustration</p> <p><i>Write a complicated case you have encountered during the period of clinical practicum. Please describe your nursing process (assessment, diagnosis, planning, implementation and Evaluation) and collaboration with the other healthcare professions / teams.</i></p>

4.1	Domain 1 Managing clients with complex health conditions (cont'd)
4.14	Sub-specialty: Hand Case illustration <i>Write a complicated case you have encountered during the period of clinical practicum. Please describe your nursing process (assessment, diagnosis, planning, implementation and Evaluation) and collaboration with the other healthcare professions / teams.</i>

4.1	Domain 1 Managing clients with complex health conditions (cont'd)
4.15	Sub-specialty: Foot and Ankle Case illustration <i>Write a complicated case you have encountered during the period of clinical practicum. Please describe your nursing process (assessment, diagnosis, planning, implementation and Evaluation) and collaboration with the other healthcare professions / teams.</i>

4.1	Domain 1 Managing clients with complex health conditions (cont'd)
4.16	Sub-specialty: Sport Case illustration <i>Write a complicated case you have encountered during the period of clinical practicum. Please describe your nursing process (assessment, diagnosis, planning, implementation and Evaluation) and collaboration with the other healthcare professions / teams.</i>

4.1	Domain 1 Managing clients with complex health conditions (cont'd)
4.17	Sub-specialty: Musculoskeletal tumor (only applicable for those tumor centres)
	<p>Case illustration</p> <p><i>Write a complicated case you have encountered during the period of clinical practicum. Please describe your nursing process (assessment, diagnosis, planning, implementation and Evaluation) and collaboration with the other healthcare professions / teams.</i></p>

4.2	Domain 2 Therapeutic nurse-client relationship
	Case illustration <i>Please describe how you manage therapeutic relationship with your clients and their families.</i>
4.3	Domain 3 Effective leadership and team work
	Case illustration <i>Please describe how you manage your resource and lead the team in your service.</i>

4.4	<p>Domain 4 Quality assurance and improvement</p> <hr/> <p>Case illustration</p> <p><i>Please describe your quality assurance and improvement activities. (e.g. review guidelines, standards and contingency plans; monitor practices and outcomes; manage complaints; benchmarking; initiate and implement clinical audit and improvement measures in collaboration with other health disciplines)</i></p>
4.5	<p>Domain 5 Managing and Negotiating Innovative and Effective Approaches to Care Delivery</p> <hr/> <p>Case illustration</p> <p><i>Please describe</i></p> <ol style="list-style-type: none"> <i>1) how you manage and adopt appropriate evidence-based practice and appropriate nursing model in your practices;</i> <i>2) how you plan your schedule, resource, indicators and monitoring mechanism for supporting the services; and</i> <i>3) how you re-engineers your work process and manage the related changes and risks.</i>

4.6	<p>Domain 6 Enhancing professional attributes of general and advanced practice</p> <hr/> <p>Case illustration</p> <p><i>Please describe your activities regarding enhancing professional attributes.</i></p> <p><i>(e.g. evidence-based practice, research, resource person, role model for peers and colleagues)</i></p>
4.7	<p>Domain 7 Enhancing personal attributes</p> <hr/> <p>Case illustration</p> <p><i>Please describe how you enhance your personal attributes.</i></p>

4.9. Evaluation Sheet

Evaluation Sheet A - Periodical Evaluation Record (To be completed by Mentor / Supervisor and Trainee before transfer to other institutes if appropriate)

Clinical Institute 1: _____

Ward / Department: _____

Evaluation
Mentor

Trainee

Signature of Trainee: _____ Date: _____

Signature of Mentor: _____ Date: _____

(Additional sheet is required to attach where appropriate)

Clinical Institute 2: _____

Ward / Department: _____

Evaluation

Mentor

Trainee

Signature of Trainee: _____ Date: _____

Signature of Mentor: _____ Date: _____

Clinical Institute 3: _____

Ward / Department: _____

Evaluation

Mentor

Trainee

Signature of Trainee: _____ Date: _____

Signature of Mentor: _____ Date: _____

Evaluation Sheet B – Summary Evaluation Record (To be completed by Nurse Supervisor
 – NO / APN/ WM / NS / DOM / NC)

Ward:

Department:

Training Period: from _____ to _____

Date	Trainee's Feedback	Name and Signature of Trainee

Date	Mentor's Feedback	Name and Signature of Mentor

Date	Nurse Supervisor's Feedback (NO / APN / WM / NS / DOM / NC)	Nurse Supervisor	
		Name and Signature	Rank

Countersigned by DOM / Unit Head:

_____ (Name and Signature)

Date: _____

Declaration of Accuracy

I certify that the information contained in the Log Book covering the period from _____ to _____ is true and accurate regarding to my training experience.

Signature of Trainee : _____

Name of Trainee : _____

Date : _____