

AO Trauma Course—Basic Principles of Fracture Management Program

Day 1					
Time		Duration	Activity	Core/ Optional	Faculty
08:00	08:15	15	Registration + Coffee		
08:15	08:30	15	Welcome, introduction and the AO world		Lasse Birkelund / Tobias Kvanner
			Module 1: Injury pattern (soft-tissue and bone) and biology of bone healing		
08:30	08:45	15	Course Content, bone healing and classification	C	Lasse Birkelund / Tobias Kvanner
08:45	08:55	10	Soft tissue, biology and effect on bone healing	C	Lasse Birkelund
08:55	09:05	10	Introduction to Skills Lab		Anders Jordy/Per Gundtoft
09:05	09:30	25	COFFEE BREAK		
09:30	11:45	135	AO Skills Lab A. Torque measurement of bone screws (10) B. Soft-tissue penetration during drilling (10) C. Heat generation during drilling (10) D. Mechanics of bone fractures (10) E. Techniques of reduction, part 1 (10) F. Techniques of reduction, part 2 (10) G. Mechanics of intramedullary fixation (10) H. Mechanics of plate fixation (10) J. Fracture healing and plate fixation (10) K. Damaged implant removal (10)	C	Anders Jordy/Per Gundtoft
11:45	13:00	75	Lunch break and check-in		
			Module 2: Stability and biomechanics of bone healing		Moderator: Anders Jordy
13:00	13:15	15	Reduction technique + introduction absolute/relative stability	C	Tobias Kvanner Aasvang
13:15	13:30	15	Absolute stability: biomechanics, techniques and fracture healing	C	Anders Jordy

13:30	14:30	60	Practical exercise 1: Internal fixation with screws and plates—absolute stability • Video: 00139, part 1 (lag screw, position screw, plate with overbending) • Bone model: 0066, 1143	C	Anders Jordy
14:30	14:45	15	Relative stability: biomechanics, techniques and fracture healing	C	Tobias Kvanner Aasvang
14:45	15:45	60	Practical exercise 2: Application of a modular large external fixator Please choose one of the following. Time permitting, a second exercise can be performed (add an extra 30 minutes) • Video: 00116 (tibia modular external fixator) • Bone model: 1111	C	Tobias Kvanner Aasvang
15:45	16:15	30	COFFEE BREAK		
16:15	16:30	15	Relative stability with plate. Philosophy and development. External fixation techniques.	C	Marie Fridberg
16:30	17:30	60	Practical exercise 3: Principle of the internal fixator using the locking compression plate (LCP) • Video: 00112 • Bone model: 1142 • Bone model: 0068 (bridge plating MIPO) • Bone model: 0081 (angular stability in osteoporotic bone)	C	Moderator: Marie Fridberg
17:30	17:50	20	Principles of diaphyseal fracture management—what is important in treating these fractures? Relative stability in diaphyseal fractures.	C	Tobias Kvanner Aasvang
17:50	18:10	20	Management principles for articular fractures—how do they differ from diaphyseal fractures?	C	Per Gundtoft
18:10	18:20	10	Summary of the day Q&A		Anders Jordy
18:20	19:30	60	Faculty meeting		All
19:30	21:15	105	Dinner		
21:15	22:30	75	Fireside Discussion (not mandatory) - Den uheldige kirurg		Juozas Petruskevicius

AO Trauma Course—Basic Principles of Fracture Management Program

<u>Day 2</u>					
Time		Duration	Activity	Core/ Optional	Faculty
7:30	8:00	30	Registration		
			Module 3: Principles and management of diaphyseal fractures		Moderator: Peter Max Halschou-Jensen
8:00	8:15	15	Good Morning - Recap yesterday - intro today		Peter Max Halschou-Jensen
8:15	8:30	15	Preoperative planning—rationale and how to do it	C	Marie Fridberg
8:30	8:45	15	Principles of diaphyseal fracture management. Relative stability with IM	O	Peter Max Halschou-Jensen
8:45	9:30	45	Practical exercise 4: Reamed intramedullary (IM) nailing This nailing exercise can be done for a tibial shaft fracture or a femoral shaft fracture. Option 1: Tibial shaft fractures—IM nailing with the expert tibial nail (ETN) (with reaming) • Video: 00130 • Bone model: 1149-01 • Bone model: ASLS perspex model	C	Peter Max Halschou-Jensen
9:30	10:00	30	COFFEE BREAK		
10:00	10:15	15	Forearm fractures—understanding the principles of diaphyseal and articular fractures	C	Marianne Lind
10:15	11:15	60	Preoperative planning—“plan your forearm operation”	C	Marianne Lind

11:15	12:30	75	Practical exercise 5: Operate your plan—fixation of a 22C1 forearm fracture using the LCP 3.5 (8 and 11 holes) • Bone model: 6501	C	Marianne Lind
12:30	13:30	60	LUNCH BREAK		
13:30	15:15	105	Small group discussion 1 Discussion on general principles, classification, concepts of stability, their influence on bone healing, and how to apply implants to achieve appropriate stability		1.:BV,MF 2:ML,JP 3: PG,PMH 4:TKA,AJO
			Module 4: Principles and management of articular fractures		Moderator: Bjarke Viberg
15:15	15:30	15	Olecranon fracture - types and treatment	C	Liv Vesterby
15:30	16:20	50	Practical exercise 6: Tension band wiring of the olecranon • Video: 00132 • Bone model: 6011	C	Liv Vesterby
16:20	16:45	25	COFFEE BREAK		
16:45	17:00	15	Ankle fractures—a systematic approach for their fixation	C	Peter Siesing Mejer
17:00	18:00	60	Practical exercise 7: Management of a type 44C malleolar fracture • Video: 00138 • Bone model: LD3120	C	Peter Siesing Mejer
18:00	18:15	15	Summary of the day Q&A		Bjarke Viberg
18:15	19:15	60	Faculty meeting		All
19:30			Course dinner		

AO Trauma Course—Basic Principles of Fracture Management Program

Day 3					
Time		Duration	Activity	Core/ Optional	Faculty
7:45	8:15	30	Registration		
8:15	8:30	15	Good Morning - Recap yesterday - intro today		Juozas Petruskevicius
			Module 5: Hip Fractures		Moderator: Juozas Petruskevicius
8:30	8:45	15	Geriatric patients- optimizing for surgery and choice of implant. Impact of osteoporosis.	O	Bjarke Viberg
8:45	9:00	15	Femoral neck fractures	C	Bjarke Viberg
9:00	9:30	30	Practical exercise 8: Femoral neck fracture fixation Using the 7.3 mm Cannulated Screw Video 00104	C	Moderator: Bjarke Viberg
9:30	9:45	15	COFFEE BREAK		
9:45	10:00	15	Trochanteric fractures	C	Morten Jon Andersen
10:00	11:00	60	Practical exercise 9: Management of a trochanteric fracture using a DHS • New video: 00137 • Bone model: LD2220.01	C	Morten Jon Andersen
11:00	11:15	15	Subtrochanteric fractures	C	Morten Jon Andersen
11:15	11:30	15	Patella fractures	C	Peter Max Halschou-Jensen
11:30	12:30	60	LUNCH BREAK		
12:30	13:30	60	Small group discussion 2: Management principles for the treatment of articular fractures	C	1:MJA,ML 2:PG,PMH 3:PSM,TKA 4: ??,JP

			Module 6: Emergency management, complications and special fractures		Moderator: Lasse Birkelund
13:30	13:45	15	Management of open fractures	O	Per Gundtoft
13:45	14:00	15	Compartment syndrome - diagnose and treatment	O	Peter Siesing Mejer
14:00	14:15	15	Emergency management of pelvic fractures—a critical skill can save lives	O	Lasse Birkelund
14:15	14:30	15	Treatment algorithms for the polytrauma patient	O	Per Gundtoft
14:30	14:45	15	COFFEE BREAK		
14:45	15:45	60	Small group discussion 3: Final case discussion (polytrauma, complications, special fractures, eg, geriatric fractures, osteoporosis, periprosthetic fractures)		1:PSM, LBI 2:Mangler, MJA 3:ML, BV 4:TKA, PG
15:45	16:00	15	Violation of principles, delayed union, malunion, nonunion	O	Juozas Petruskevicius
16:00	16:15	15	Fracture-related infection—how to prevent, diagnose, and manage	C	Juozas Petruskevicius
16:15	16:25	10	Closing remarks - Evaluation - Feedback	C	Lasse Birkelund / Tobias Kvanner
16:25	16:30	5	End of the course	C	Lasse Birkelund / Tobias Kvanner