

Integrated Course in Occlusion
Incoming Second Year AY 2024/25
Term IV (12.5.2025 – 6.6.2025) 4 weeks

PREPARATORY READING FOR LECTURES

Date	Lecture Topic	Reference Material
Week 1 12.5.25 (Mon)	<i>[PUBLIC HOLIDAY]</i>	-
Week 1 13.5.25 (Tues)	Course Introduction: Concepts of Occlusion	-
Week 1 15.5.25 (Thurs)	Making Impressions / Study Casts	Notes
Week 2 19.5.25 (Mon)	Articulation of Casts. Concept of Terminal Hinge Axis (THA); Kinematic and Arbitrary Facebow Transfer	Shillingburg Chapter 12
Week 2 20.5.25 (Tues)	<i>[NO LECTURE]</i>	-
Week 3 26.5.25 (Mon)	Maxillomandibular Records: Active vs Passive CR Registrations; Technique modifications in dentate / partially dentate / fully edentulous situation.	Zarb Chapter 16 Shillingburg Chapter 12
Week 3 27.5.25 (Tues)	Functional Anatomy and Biomechanics of the Stomatognathic System I - Dento-Alveolar Complex and Cranio-Mandibular Articulation	Okeson Chapter 1 Mohl Chapters 4,5,6 DuBrul Chapter 4 Shillingburg Chapter 13 Wiskott Chapter 5
Week 4 2.6.25 (Mon)	Functional Anatomy and Biomechanics of the Stomatognathic System II - Neuroanatomy and Physiology	Okeson Chapter 2 Mohl Chapters 7,8,10,11 Wiskott Chapter 4
Week 4 3.6.25 (Tues)	Alignment and Occlusion of the Dentition	Okeson Chapter 3

A/P Keson Tan
Course Director

Amended 11/3/25

cc. Director, Discipline of Prosthodontics, OD and Endodontics
 Dr Frank Lee
 Dr Michael Lim
 Dr Teo Juin Wei
 Dr Tay Koong Jiunn
 Dr Chen Xin, Dr Deborah Yao, Dr Samuel Lau, Dr Seet Ren Hao
 Dr Elvin Leong
 Dr Wong Kuan Yee
 Dr Sophia Hui Xin Yee

Integrated Course in Occlusion
Second Year AY 2025/26
Term I (7.7.25 - 19.9.25) 11 weeks
PREPARATORY READING FOR LECTURES

Date	Lecture Topic	Reference Material
Week 1 8.7.25 (Tues)	Centric Relation	Okeson Chapters 1,8
Week 1 10.7.25 (Thurs)	Mechanics of Mandibular Movement; Posterior determinants; Active vs. Passive; Condylar border movements;	Okeson Chapter 4
Week 2 15.7.25 (Tues)	The occlusal interface: Structural and neurophysiologic considerations. What is an occlusal interference?	Okeson Chap 17, 19 Mohl Chapter 21 Zarb Chapter 15 Wiskott Chapter 4
Week 2 17.7.25 (Thurs)	<i>[NO LECTURE]</i>	-
Week 3 22.7.25 (Tues)	Eccentric Pathways: Registration and coordination	Okeson Chap 18 Mohl Chapter 9 Shillingburg Chapter 12 Zarb Chapter 17 Wiskott Chapter 5, 17
Week 3 24.7.25 (Thurs)	Determinants of Occlusal Morphology	Okeson Chap 6
Week 4 29.7.25 (Tues)	<i>NO CLASS <NUS Orientation Week –One></i>	-
Week 4 31.7.25 (Thurs)	<i>NO CLASS < NUS Orientation Week –One></i>	-
Week 5 5.8.25 (Tues)	<i>NO CLASS <NUS Orientation Week Zero> NUS Rag Day Preparations</i>	-
Week 5 7.8.25 (Thurs)	<i>NO CLASS <NUS Orientation Week Zero> NUS Rag Day Preparations</i>	-
Week 6 12.8.25 (Tues)	Mandibular Motion Envelopes; VIDEO on Functional Jaw Movements	Lundeen & Gibbs Chapter 1
Week 6 14.8.25 (Thurs)	Vertical Dimension in relation to Removable Prosthodontics Dimension	-
Week 7 19.8.25 (Tues)	Anterior Guidance: Recording Anterior Determinants; Dentate and edentulous situations	Okeson Chap 6
Week 7 21.8.25 (Thurs)	Occlusal Considerations in Removable Prosthodontics	-
Week 8 26.8.25 (Tues)	Criteria for Optimum Functional Occlusion	Okeson Chapter 5
Week 8 28.8.25 (Thurs)	<i>[NO LECTURE]</i>	-
Week 9 2.9.25 (Tues)	Occlusal Schemes: Natural vs. Iatrogenic; Rationale for selection	Mohl Chap 12
Week 9 4.9.25 (Thurs)	<i>[NO LECTURE]</i>	-
Week 10 9.9.25 (Tues)	Tutorial: Whole Class: The Artex Articulator System	-
Week 10 11.9.25 (Thurs)	<i>[NO LECTURE]</i>	-
Week 11 16.9.25 (Tues)	END OF COURSE TEST	-
Week 11 18.9.25 (Thurs)	Overview of Temporo-Mandibular Disorders (TMD)	Okeson Chaps 7, 8 , 9 , 10, 11

READING LIST - OCCLUSION and TMD

Recommended Textbook

Okeson J P : **Management of Temporomandibular Disorders and Occlusion**. 7th Edition. Elsevier Mosby, St Louis/Baltimore/Philadelphia/ Toronto, 2012

LATEST Ed: 8th Edition. Elsevier Mosby, St Louis/Baltimore/Philadelphia/ Toronto, April 2019

Recommended Reference Textbook

Mohl N D, Zarb G A , Carlsson G E, Rugh J D : **A Textbook of Occlusion**. Quintessence Publishing Co. Inc., Chicago/London/Berlin/Sau Paulo/Tokyo/ Hong Kong, 1998.

Required Additional Reading

Wiskott H W A. **Fixed Prosthodontics: Principles and Clinics**. Quintessence Publishing Co Ltd. 2011. Chapter 4: Forces and Mastication, pp. 69-96; Chapter 5: Mandibular Movements and Functional Occlusion, pp. 97-126 and Chapter 17: Occlusal Relationships, pp. 581-614.

Shillingburg H T, Hobo S, Whitsett L D : **Fundamentals of Fixed Prosthodontics**. 3rd Edition, Quintessence Publishing Co. Inc., Chicago, 1997. Chapters 2: Fundamentals of Occlusion, pp. 55-78; Chapter 12: Articulation of Casts, pp. 259-299 and Chapter 13: Wax Patterns, pp. 299-326.

Rosentiel, SF, Land, MF and Fujimoto, J: **Contemporary Fixed Prosthodontics**. 4th Edition. The C.V. Mosby Company. St. Louis, Toronto, London, 2006. Chapter 3: Principles of Occlusion; pp 65-84.

Lundeen, HC and Gibbs, CH, **Advances in Occlusion**. John Wright and Sons Ltd., London, 1993. Chapter 1 pp 2-32

Lundeen, HC, and Gibbs, CH. **The Function of Teeth. The physiology of mandibular function related to occlusal form and esthetics**. L & G Publishers, 2005.

Zarb GA, Bergman B, Clayton JA, MacKay HF (Eds). **Prosthodontic Treatment for the partially edentulous patient**. Mosby St Louis. 12th Edition. 2003 Chapter 16: Various centric positions and methods of recording them. Chapter 17: Articulators in restoring occlusion. Chapter 15: The consequences of occlusal interferences. pp 171-187, 188-208 and 161-170.

Malone WFP, Koth DL, Cavazos E, Kaiser DA, Morgano SM, Eds. **Tylman's Theory and Practice of Fixed Prosthodontics**, 8th Edition, Ishiyaku EuroAmerica Inc., St Louis, 1999, Chapter 14: Occlusion pp 301-323.

DuBrul EL: **Sicher and DuBrul's Oral Anatomy**, 8th Edition. Ishiyaku EuroAmerica Inc., St Louis, 1998. Chapter 1: pp 54-58; Chapter 4: pp 104-132; Chapter 5: pp 133-159; Chapter 17: pp 319-329.

<https://www.amanggirrbach.com/en/products/articulation/artex-cr/>

<https://www.amanggirrbach.com/en/products/articulation/artex-facebow>

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https://www.amanggirrbach.com/fileadmin/_agweb_2013/media/mediathek/Print/Instructions/Equipment/Model_fabrication_Articulation/Artex_Gesichtsbogen_Facebow_Anleitung_Instruction_INT.pdf

https://www.amanggirrbach.com/fileadmin/_agweb_2013/media/mediathek/Print/Instructions/Equipment/Model_fabrication_Articulation/Artex_Uebertragungsstand_INT.pdf

Additional References - Advanced

McNeill, C (Ed). **Science and Practice of Occlusion**, Quintessence Publishing Co. Inc., Chicago/London/Berlin/Tokyo, 1997.

Okeson JP, Ed. **Bell's Orofacial Pains: The Clinical Management Of Orofacial Pain**, 6th Ed. Quintessence Publishing Co. Inc., Chicago / London / Berlin / Tokyo, 2005.

Zarb GA, Carlsson GE, Sessle BJ, Mohl ND Eds. **Temporomandibular Joint and Masticatory Muscle Disorders**. 2nd Edition. Mosby, St. Louis, Toronto, London, 1995.

- Sarnat BG, Laskin DM. ***The Temporomandibular Joint – A Biological Basis for Clinical Practice***, 4th Ed., W. B. Saunders Co., Philadelphia, 1992.
- Okeson JP, Ed. ***Orofacial Pain – Guidelines for Assessment, Diagnosis and Management***, 6th Ed Quintessence Publishing Co. Inc., Chicago/London/Berlin/Tokyo, 1996.
- McNeill, C. ***Craniomandbular Disorders - Guidelines for Evaluation, Diagnosis and Management – The American Academy of Craniomandibular Disorders***, Quintessence Publishing Co. Inc., Chicago / London / Berlin / Tokyo, 1990.
- McNeill, C. ***Current Controversies in Temporomandibular Disorders***, Quintessence Publishing Co. Inc., Chicago/London/Berlin/Tokyo, 1992.