Course Map

Outline

Department name	Department of Forestry
Class	Master's Program Note: 2025-4 Curriculum Committee Meeting – (1) "Review of Literature in Water Chemistry and Nutrient Cycling in Forest" has been renamed to "Literature Review in Forest Environment and Tree Physiology ".

Educational Objectives

No.	Item
1	Cultivate scientific and technological talents with international outlook, independent and innovative ability in the conservation and management of forest resources and the sustainable utilization of biomaterials.

Student's Core Competencies

No.	Item	Corresponding to Educational Objectives No.
1	Forest resources conservation and agriculture	1
2	Professional knowledge and skills in forest management	1
3	Professional knowledge in sustainable utilization of biomaterial	1

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October 22, 2026

Lesson Plan

Course Chinese Name	Course English Name	Planning points (See note)				Corresponding core competency No.	Sugges-ted grade level	Offering department	Notes
		1	2	3	4				
College Core Courses (If not exempted, please state compulsory or electives)									
Compulsory Courses									
碩士論文	Thesis	M	C	Y	6	1-30,2-20 3-50	2	Department of Forestry	
森林經營與管理專題(一)	Seminar in Forest Management and Administration (I)	M	C	Y	2	2-100	1	Department of Forestry	
森林生物與保育專題(一)	Seminar in Forest Biology and Conservation (I)	M	C	Y	2	1-100	1	Department of Forestry	
林產物性專題(一)	Seminar in Physical Aspects of Forest Products (I)	M	C	Y	2	3-100	1	Department of Forestry	
林產化性專題(一)	Seminar in Chemical Aspects of Forest Products (I)	M	C	Y	2	3-100	1	Department of Forestry	
森林經營與管理專題(二)	Seminar in Forest Management and Administration (II)	M	C	Y	2	2-100	2	Department of Forestry	
森林生物與保育專題(二)	Seminar in Forest Biology and Conservation (II)	M	C	Y	2	1-100	2	Department of Forestry	
林產物性專題(二)	Seminar in Physical Aspects of Forest Products (II)	M	C	Y	2	3-100	2	Department of Forestry	

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林產化性專題(二)	Seminar in Chemical Aspects of Forest Products (II)	M	C	Y	2	3-100	2	Department of Forestry	

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		1	2	3	4				
Elective Courses									
氣候變遷與森林碳管理特論	Special Topics on Climate Change and Forest Carbon Management	M	A	S	3	2-100	1	Department of Forestry	2022-M1 name change
掃瞄式電顯林學應用技術	Application of Electronic Microscopy in Forestry	M	AB	S	3	1-80,2-20	1	Department of Plant Pathology	2022-M1 recovered 2020-S1 accidental removal
森林益康與創新應用	Forest Benefits and Innovation Application	M	A	S	2	1-40,2-40,3-20	1	Department of Forestry	2021-M4 change to offline teaching 2021-M3 newly opened, both MSc and Bachelor
基因體學概論	Introduction of Genomics	M	A	S	3	3-100	1	Department of Forestry	2021-S1 newly opened
木構造環境設計學特論	Special Topics in Environmental Design for Wood Construction	M	A	S	3	3-100	1	Department of Forestry	2018-S2 newly opened
森林保育文獻研讀	Review of Literature in Forest Conservation	M	C	Y	2	1-80,2-20	2	Department of Forestry	2018-S1 newly opened
森林資源研究方法與論文寫作	Principle of research in forest resources and scientific writing	M	A	S	3	1-60,2-20,3-20	1	Department of Forestry	2017-S2 newly opened 2022-M5 available for both MSc and Bachelor
木質結構設計特論	Special Topics in Wood Construction Design	M	A	S	3	3-100	1	Department of Forestry	2015-S2 newly opened
生質能源技術	Bioenergy Technology	M	A	S	3	6-100	1	Department of Forestry	2015-S2 change to offline teaching
森林集水區經營特論	Special Topic in Forest Watershed Management	M	A	S	3	1-100	1	Department of Forestry	2013-S2 newly opened
數據分析與統計應用	Data Analysis and Statistical Applications	M	A	S	3	1-35,2-35 3-30	1	Department of Forestry	2013-S2 newly opened

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榕果生物學	Biology of Fig and its Associated Animals	M	A	S	3	1-100	1	Department of Forestry	2011-S2 newly opened
製漿造紙學特論	Special Topics in Pulping and Papermaking	M	A	S	3	3-100	2	Department of Forestry	2011-S2 name update
生態氣候學與復育生態學特論	Special Topics on Ecoclimatology and Restoration Ecology	M	A	S	2	1-100	1	Department of Forestry	2010-S1 newly opened
天然資源評估法	Natural Resources Assessment	M	A	S	3	2-100	1	Department of Forestry	
高等遙測影像分析	Advanced Digital Image Analysis	M	A	S	3	2-100	2	Department of Forestry	
林木生長收穫學特論	Special Topics in Growth and Yield	M	A	S	3	2-100	1	Department of Forestry	
資源多變量分析	Resources Multivariate Analysis	M	A	S	3	2-100	2	Department of Forestry	
數位遙測影像分析	Digital Remote Sensing Imagery Analysis	M	A	S	3	2-100	1	Department of Forestry	
高等數位地圖學	Advanced Digital Cartography	M	A	S	3	2-100	2	Department of Forestry	
森林經理學研究法	Research Methods of Forest Management	M	A	S	2	2-100	1	Department of Forestry	
數位資源資訊系統	Digital Resources Information System	M	A	S	3	2-100	1	Department of Forestry	
高等森林測計學	Advanced Forest Measuration	M	A	S	3	2-100	2	Department of Forestry	
林業經濟學特論	Special Topics in Forestry Economics	M	A	S	3	2-100	1	Department of Forestry	
林業政策及法規研究法	Research Methods in Forest Policy and Law	M	A	S	3	2-100	1	Department of Forestry	
數量森林經營學	Quantitative Approaches to Forest Management	M	A	S	3	2-100	1	Department of Forestry	
資源遙感探測	Remote Sensing of Natural Resources	M	A	S	3	2-100	1	Department of Forestry	
森林生態生理學	Forest Ecophysiology	M	A	S	3	1-100	2	Department of Forestry	
生態生理學專題實驗	Special Topics in Eco-Physiological Experiment	M	AB	S	3	1-100	2	Department of Forestry	

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森林生態調查與分析	Methods of Forest Vegetation Ecology	M	A	S	3	1-80,2-20	1	Department of Forestry	
現代育林問題	Issues in Contemporary Silviculture	M	A	S	2	1-100	1	Department of Forestry	
森林美學特論	Special Topics in Forest Esthetics	M	A	S	3	1-100	1	Department of Forestry	
林木育種學特論	Special Topics in Forest Tree Breeding	M	A	S	3	1-100	1	Department of Forestry	
樹木學特論	Special Topics in Dendrology	M	A	S	3	1-100	2	Department of Forestry	
森林生態學特論	Special Topics in Forest Ecology	M	A	S	3	1-100	1	Department of Forestry	
育林學特論	Special Topics in Silviculture	M	A	S	3	1-100	1	Department of Forestry	
林木遺傳學特論	Special Topics in Forest Genetics	M	A	S	3	1-100	1	Department of Forestry	
林木遺傳參數估計	Estimation of Genetics Parameters in Forest Trees	M	AB	S	3	1-100	2	Department of Forestry	
自然資源遺傳保育	Genetic Conservation of Natural Resources	M	A	S	3	1-100	1	Department of Forestry	
林木遺傳育種研究法	Research Methods of Forest Genetics and Breeding	M	C	S	2	1-100	1	Department of Forestry	
森林土壤學特論	Special Topics in Forest Soil Science	M	A	S	3	1-100	1	Department of Forestry	
林木菌根研究	Tree Mycorrhizal Research	M	A	S	3	1-100	2	Department of Forestry	
木材化學特論	Special Topics in Wood Chemistry	M	A	S	3	3-100	1	Department of Forestry	
木材抽出物	Wood Extractives	M	A	S	3	3-100	1	Department of Forestry	
纖維素化學	Cellulose Chemistry	M	A	S	3	3-100	1	Department of Forestry	
木材性質學特論	Special Topics in Wood Properties	M	A	S	3	3-100	1	Department of Forestry	
紙張性質學特論	Special Topics in Paper Properties	M	A	S	3	3-100	1	Department of Forestry	

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木材加工學特論	Special Topics in Wood Processing	M	A	S	3	3-100	1	Department of Forestry	
木材利用學特論	Special Topics in Wood Utilization	M	A	S	3	3-100	1	Department of Forestry	
木材膠合原理	Theory of Wood Adhesions	M	A	S	3	3-100	1	Department of Forestry	
生物質木材膠合劑	Biomass Wood Adhesives	M	A	S	3	3-100	1	Department of Forestry	
木材膠合劑性能檢定原理	Testing Theory for Performance of Wood Adhesives	M	A	S	3	3-100	1	Department of Forestry	
木質材料學特論	Special Topics in Wood-Based Materials	M	A	S	3	3-100	1	Department of Forestry	
樹脂化學	Resin Chemistry	M	A	S	3	3-100		Department of Forestry	
改良木材學特論	Special Topics in Improved Wood	M	A	S	3	3-100		Department of Forestry	
生物質能源及化學利用特論	Special Topics on Biomass Energy and Chemicals	M	A	S	3	3-100	1	Department of Forestry	
再生性資源製造膠合劑	Adhesives from Renewable Resources	M	A	S	3	3-100	1	Department of Forestry	
木材塗料學特論	Special Topics in Wood Coatings	M	A	S	3	3-100	1	Department of Forestry	
木材改質及保存學特論	Special Topics in Wood Modification and Preservation	M	A	S	3	3-100	1	Department of Forestry	2015-S1 name change
資源調查與測計文獻研讀	Review of Literature in Forest Inventory and Mensuration	M	C	Y	2	2-100	2	Department of Forestry	
遙測及地理資訊文獻研讀	Review of Literature in Remote Sensing and Geographical Information Science	M	C	Y	2	2-100	2	Department of Forestry	
森林植物分類文獻研讀	Review of Literature in Taxnomy of Forest Plants	M	C	Y	2	1-100	2	Department of Forestry	
森林生態森林文獻研	Review of Literature in	M	C	Y	2	1-100	2	Department of Forestry	

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讀	Forest Ecology								
育林文獻研讀	Review of Literature in Silviculture	M	C	Y	2	1-100	2	Department of Forestry	
森林文獻研讀	Review of Literature in Forestry	M	C	Y	2	1-100	2	Department of Forestry	
造紙文獻研讀	Review of Literature in Paper Making	M	C	Y	2	3-100	2	Department of Forestry	
木質材料文獻研讀	Review of Literature in Wood-Based Materials	M	C	Y	2	3-100	2	Department of Forestry	
木材乾燥與鑑別文獻研讀	Review of Literature in Wood Drying and Identification	M	C	Y	2	3-100	2	Department of Forestry	
再生性資源與膠合劑文獻研讀	Review of Literature in Biocomposites and Adhesives	M	C	Y	2	3-100	2	Department of Forestry	
家具製造與木材塗裝文獻研讀	Review of Literature in Furniture Making and Wood Finishing	M	C	Y	2	3-100	2	Department of Forestry	
林產文獻研讀	Review of Literature in Forest Products	M	C	Y	2	3-100	2	Department of Forestry	
森林化學文獻研讀	Review of Literature in Tree Chemistry	M	C	Y	2	3-100	2	Department of Forestry	
森林環境與林木生理文獻研讀	Literature Review in Forest Environment and Tree Physiology	M	C	Y	2	1-100	2	Department of Forestry	2025-4, "Review of Literature in Water Chemistry and Nutrient Cycling in Forest" has been renamed to "Literature Review in Forest Environment and Tree Physiology"
生質能源文獻研讀	Review of Literature in Biomass Energy	M	C	Y	2	3-100	2	Department of Forestry	
森林遊樂文獻研讀	Review of Literature in Forest Recreation	M	C	Y	2	2-100	2	Department of Forestry	2008-S1 newly opened
林產產業分析與營運評估	Analysis and Operation Evaluation of Forest Products Industry	M	A	S	3	3-100	1	Department of Forestry	
木材比較解剖學	Comparative Wood Anatomy	M	A	S	3	1-100	1	Department of Forestry	

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森林生態系的生物地質化學	Biogeochemistry in Forest Ecosystem	M	A	S	2	1-100	2	Department of Forestry	
生態系經營學	Ecosystem Management	M	A	S	2	1-100	2	Department of Forestry	
野生動物棲息地經營	Wildlife Habitat Management	M	A	S	3	1-100	1	Department of Forestry	
植物多酚成份	Plant Polyphenol	M	A	S	2	3-100	2	Department of Forestry	
森林化學儀器分析	Instrumental Analysis of Forestry Chemistry	M	A	S	3	3-100	1	Department of Forestry	
林木代謝產物生物活性研究法	Methods in Bioactivities Analysis of Metabolites from Woody Plants	M	A	S	2	3-100	2	Department of Forestry	
濱水區經營	Riparian Management	M	A	S	2	2-100	1	Department of Forestry	
植物代謝體學	Plant Metabonomics	M	A	S	2	3-100	2	Department of Forestry	
植物代謝體學分析技術	Methods in Plant Metabonomics	M	B	S	2	3-100	2	Department of Forestry	
植物生物反應器	Plant Bioreactor	M	AB	S	2	3-100	2	Department of Forestry	
木材物理學特論	Special Topics in Wood Physics	M	A	S	2	3-100	1	Department of Forestry	
生質物氣化程序	Biomass Gasification Process	M	A	S	3	5-100	1	Department of Forestry	2022-M5: available to both MSc and Bachelor
生質物精煉程序	Biomass Refinery Process	M	A	S	3	3-100	1	Department of Forestry	2008-S1 newly opened
造紙化學特論	Special Topics in Paper Chemistry	M	A	S	3	3-100	1	Department of Forestry	
造紙學特論	Special Topics on Papermaking Science	M	A	S	3	3-100	2	Department of Forestry	
遊憩與公園遊客管理	Visitor Management in Parks and Recreation	M	A	S	3	2-100	1	Department of Forestry	2008-S1 newly opened

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