

課程流水號 Serial Number	24034
課號 Course Number	LS6055
班次 Class	*
科目名稱(中文) Course Title(in Chinese)	荷爾蒙
科目名稱(外文) Course Title(In English or other languages)	Hormone
授課老師(中文) Instructor(in Chinese)	高永旭
授課老師(外文) Instructor(In English or other languages)	Yung-Hsi Kao
辦公時間(中文) Office Hour(in Chinese)	9:00-12:00 (Monday)
辦公時間(外文) Office Hour(In English or other languages)	9:00-12:00 (Monday)
課程目標(中文) Course Objective(in Chinese)	<p>一：提供學生內分泌學方面的知識</p> <p>二：訓練學生具有口頭表達內分泌生理領域知識的能力與技巧</p> <p>三：訓練學生具有書面表達，文獻閱讀與整合以及批判內分泌生理領域知識的能力與技巧</p> <p>四：藉由課堂上充分的討論啟發學生對內分泌生理領域的興趣以及專業知識的取得</p>
課程目標(外文) Course Objective(In English or other languages)	<p>1. Provide endocrine knowledge for students.</p> <p>2. Train students with concepts and skills in presenting endocrine topic.</p> <p>3. Train students with concepts and skills in reading endocrine articles and writing an endocrine paper report with comments from these published articles.</p> <p>4. Inspire students with interests in endocrine physiology through the class discussion.</p>
授課內容(中文) Course Description(in Chinese)	<p>Week 1-6 I. Introduction to the endocrine systems of vertebrates (1-4)</p> <p>Week 1 Nature of chemical mediation</p> <p>Week 2 What are hormones? What do they do?</p> <p>Week 3 Endocrine methodologies</p> <p>Week 4 Hormone biosynthesis and metabolism.</p> <p>Week 5 Mechanisms of hormone action.</p> <p>Week 6 Overview of vertebrate systems.</p> <p>Week 7-10 II. Coordination of endocrine system function 5-8, 20</p> <p>Week 7 Pituitary gland, pituitary hormones, "master gland" evolution 5</p>

	<p>Week 8 Hypophysial-hypothalamic interactions Neurohypophysial hormones Week 9 Opiomelanocortins Week 10 Pineal gland (20)</p> <p>Week 11-18 III. Coordination Week 11 Calcium homeostasis Week 12 Gastrointestinal hormones (10) Week 13 Pancreatic hormones and metabolic regulation (11) Week 14 Growth hormones (12) Week 15 Thyroid hormones (13) Week 16 Catecholamines, the sympathoadrenal system and Adrenal steroid hormones (14-15) Week 17 Endocrinology of sex differentiation and reproduction (16-19) Week 18 Biomedical diseases: obesity, diabetes, prostate cancer</p>
<p>授課內容(外文) Course Description(In English or other languages)</p>	<p>Week 1-6 I. Introduction to the endocrine systems of vertebrates (1-4) Week 1 Nature of chemical mediation Week 2 What are hormones? What do they do? Week 3 Endocrine methodologies Week 4 Hormone biosynthesis and metabolism. Week 5 Mechanisms of hormone action. Week 6 Overview of vertebrate systems.</p> <p>Week 7-10 II. Coordination of endocrine system function 5-8, 20 Week 7 Pituitary gland, pituitary hormones, "master gland" evolution 5 Week 8 Hypophysial-hypothalamic interactions Neurohypophysial hormones Week 9 Opiomelanocortins Week 10 Pineal gland (20)</p> <p>Week 11-18 III. Coordination Week 11 Calcium homeostasis Week 12 Gastrointestinal hormones (10) Week 13 Pancreatic hormones and metabolic regulation (11) Week 14 Growth hormones (12) Week 15 Thyroid hormones (13) Week 16 Catecholamines, the sympathoadrenal system and Adrenal steroid hormones (14-15) Week 17 Endocrinology of sex differentiation and reproduction (16-19) Week 18 Biomedical diseases: obesity, diabetes, prostate cancer</p>
<p>教科書/參考書(中文) Textbook/References(in Chinese)</p>	<p>Textbook: Hadley, 2006. Endocrinology, 6th Edition, Prentice-Hall.</p> <p>Reference book:GM Besser and MO Thorner, 2002. Comprehensive Clinical Endocrinology, 3rd Edition, Mosby, Elsevier Science Limited.</p>

	Journals: Endocrinology, Endo Rev, Mol Endocr, J Endo, Acta Endo, J Clin Endo Metab, J Mol Endo, Horm Metab Res, Rec Prog Horm Res, J Steroid Biochem, Vit Horm, Steroids, Peptides, Horm Behav, Endo J, Clin Endo, GCE. Nature, Science, etc.
教科書/參考書(外文) Textbook/References(In English or other languages)	Textbook: Hadley, 2006. Endocrinology, 6th Edition, Prentice-Hall.  Reference book:GM Besser and MO Thorner, 2002. Comprehensive Clinical Endocrinology, 3rd Edition, Mosby, Elsevier Science Limited.  Journals: Endocrinology, Endo Rev, Mol Endocr, J Endo, Acta Endo, J Clin Endo Metab, J Mol Endo, Horm Metab Res, Rec Prog Horm Res, J Steroid Biochem, Vit Horm, Steroids, Peptides, Horm Behav, Endo J, Clin Endo, GCE. Nature, Science, etc.
自編教材比例 Self-compiled Textbook/References Proportion	30%
授課方式 Requirements	講授Lecture      其他Other
評量配分比重(中文) Grading(in Chinese)	Course requirement: Oral report, 40%; Exam or term paper 40%; Discussion/Appearance, 20%.
評量配分比重(外文) Grading(In English or other languages)	Course requirement: Oral report, 40%; Exam or term paper 40%; Discussion/Appearance, 20%.
課程所屬學制 Educational System	博士班(Doctoral Programme)
課程領域 Course Domain	生理
跨系課程領域 Cross Department Course Domain	

系所核心能力 Core Competencies of Department	強度指數 Overall Rating					評量方式 Corresponding Assessments
	0 不具備 Zero	1 非常低 Very Low	2 低 Low	3 普通 Medium	4 高 High	5 非常高 Very High

系所核心能力 Core Competencies of Department	強度指數 Overall Rating						評量方式 Corresponding Assessments
	0 不具 備 Zero	1 非常 低 Very Low	2 低 Low	3 普通 Medium	4 高 High	5 非常 高 Very High	
高等生物專業知識 Advanced Biological Sciences	●	●	●	●	●	●	<input type="checkbox"/> 紙筆測驗/會考 (Test/Exam) <input type="checkbox"/> 作業練習(Assignments) <input checked="" type="checkbox"/> 口頭報告/口試 (Presentation/Oral Exam) <input checked="" type="checkbox"/> 專題研究報告(書面) (Research Report(printed on paper)) <input type="checkbox"/> 實作/實驗 (Practices/Experiments) <input checked="" type="checkbox"/> 出席/課堂表現 (Attendance/Performance) <input type="checkbox"/> 學習檔案評量(Portfolios Assessment) <input type="checkbox"/> 自我評量/同儕互評(Self Assessment/ Peer Assessment) <input type="checkbox"/> 作品/創作展演 (Products/Creative Performance) <input type="checkbox"/> 其他(Others) <input type="checkbox"/> 無(No assessment)
創新及整合研究 Innovative and integrative research	●	●	●	●	●	●	<input type="checkbox"/> 紙筆測驗/會考 (Test/Exam) <input type="checkbox"/> 作業練習(Assignments) <input checked="" type="checkbox"/> 口頭報告/口試 (Presentation/Oral Exam) <input checked="" type="checkbox"/> 專題研究報告(書面) (Research Report(printed on paper)) <input type="checkbox"/> 實作/實驗 (Practices/Experiments) <input type="checkbox"/> 出席/課堂表現 (Attendance/Performance) <input type="checkbox"/> 學習檔案評量(Portfolios Assessment) <input type="checkbox"/> 自我評量/同儕互評(Self Assessment/ Peer Assessment) <input type="checkbox"/> 作品/創作展演 (Products/Creative Performance) <input type="checkbox"/> 其他(Others) <input type="checkbox"/> 無(No assessment)

系所核心能力 Core Competencies of Department	強度指數 Overall Rating						評量方式 Corresponding Assessments
	0 不具 備 Zero	1 非常 低 Very Low	2 低 Low	3 普通 Medium	4 高 High	5 非常 高 Very High	
專業寫作與表達 Professional writing and presentation	●	●	●	●	●	●	<input type="checkbox"/> 紙筆測驗/會考 (Test/Exam) <input type="checkbox"/> 作業練習(Assignments) <input type="checkbox"/> 口頭報告/口試 (Presentation/Oral Exam) <input checked="" type="checkbox"/> 專題研究報告(書面) (Research Report(printed on paper)) <input type="checkbox"/> 實作/實驗 (Practices/Experiments) <input type="checkbox"/> 出席/課堂表現 (Attendance/Performance) <input type="checkbox"/> 學習檔案評量(Portfolios Assessment) <input type="checkbox"/> 自我評量/同儕互評(Self Assessment/ Peer Assessment) <input type="checkbox"/> 作品/創作展演 (Products/Creative Performance) <input type="checkbox"/> 其他(Others) <input type="checkbox"/> 無(No assessment)
國際觀 International vision	●	●	●	●	●	●	<input type="checkbox"/> 紙筆測驗/會考 (Test/Exam) <input type="checkbox"/> 作業練習(Assignments) <input checked="" type="checkbox"/> 口頭報告/口試 (Presentation/Oral Exam) <input checked="" type="checkbox"/> 專題研究報告(書面) (Research Report(printed on paper)) <input type="checkbox"/> 實作/實驗 (Practices/Experiments) <input type="checkbox"/> 出席/課堂表現 (Attendance/Performance) <input type="checkbox"/> 學習檔案評量(Portfolios Assessment) <input type="checkbox"/> 自我評量/同儕互評(Self Assessment/ Peer Assessment) <input type="checkbox"/> 作品/創作展演 (Products/Creative Performance) <input type="checkbox"/> 其他(Others) <input type="checkbox"/> 無(No assessment)