

水產養殖系 碩士班 113 學年度入學課程結構規劃表
2024 Curricula for the Master's Program in Department of Aquaculture

			一年級 1 st Academic Year						二年級 2 nd Academic Year					
			第一學期 Semester 1			第二學期 Semester 2			第一學期 Semester 1			第二學期 Semester 2		
課程類別 Course Category			課程名稱 Course Name	學分數 Credits	時數 Hours	課程名稱 Course Name	學分數 Credits	時數 Hours	課程名稱 Course Name	學分數 Credits	時數 Hours	課程名稱 Course Name	學分數 Credits	時數 Hours
	必修 Required	應修課程數/ 應修學分數 Number of Courses Needed/ Credits Needed (14 credits)	專題討論(一) Seminar(1)	2	2	專題討論(二) Seminar(2)	2	2	專題討論(三) Seminar(3)	2	2	專題討論(四) Seminar(4)	2	2
									論文 Thesis	6	6			
系專業 課程 Departmental Professional Courses	選修 Elective	應修課程數/ 應修學分數 Number of Courses NEEDED/ Credits needed (16 credits)	水質學特論/2/2 Special Topics in Water Quality/2/2			甲殼類營養生理特論/2/2 Special topics on crustacea culture/2/2			生殖內分泌學/2/2 Reproductive Endocrinology of Fish/2/2			水產養殖特論/2/2 Special topic on aquacultur/2/2		
			水產病理學特論/2/2 Special topic on aquatic pathology/2/2			海洋生態學特論/2/2 Advanced Marine Ecology/2/2			餌料生物學特論/2/2 Special Topic in Live Food/2/2			族群生態特論/2/2 Advanced Population Ecology/2/2		
水產養殖工程特論/2/2 Specific topics on aquaculture engineering/2/2			科技管理與實驗設計/2/2 Technology Management and Experiment Design/2/2			養殖經濟學特論/2/2 Specific Topics on Aquaculture Economics/2/2								
分子選殖/2/2 molecular cloning/2/2			細胞生物學特論/2/2 Special Topics in Cell Biology/2/2			飼料添加物特論/2/2 Special of dietary supplements/2/2								
甲殼類養殖學特論/2/2 Special topics on crustacea culture/2/2			觀賞魚特論/2/2 Specific topics on Ornamental fish/2/2			儀器分析/2/2 Instrumental Analysis/2/2								
細菌學特論/2/2 Advanced Bacteriology /2/2			水產繁殖學特論/2/2 Special Topics on Fish Breeding and Propagation/2/2			池塘管理特論/2/2 Specific topics on pond management/2/2								
檢驗技術特論/2/2 Specific topics on aquatic disease detection/2/2			生物多樣性在水產養殖之應用/2/2 Applied Science of Biodiversity in Aquaculture/2/2			水產行銷學特論/2/2 Specific topics on aquaculture marketing/2/2								
生物技術/2/2 Bio-technology/2/2			水產免疫學特論/2/2 topics on aquaculture vaccines/2/2			蛋白質體學特論/2/2 Special Topics of Proteomics/2/2			科學論文寫作/2/2 Scientific Paper Writing/2/2					
研究軟體應用/2/2 Scientific software application/2/2			水產基因體/2/2 Aquaculture Genome Technologies/2/2			飼料營養特論/2/2 Advanced feed nutrition/2/2								
水產疫苗特論/2/2 topics on aquaculture vaccines/2/2			水產生物精準育種/2/2 Precision Breeding of Aquatic Organisms/2/2			農產品國際行銷管理/2/2 International Marketing Management of Agricultural Products/2/2								
魚類分類及多樣性特論/2/2 Specific topics on fish taxonomy and biodiversity/2/2			水產精準檢測技術應用 2/2 Application of Aquatic Accurate Detection Technology											

備註：

- 一、畢業總學分數為 30 學分。
- 二、必修 14 學分，選修 16 學分。
- 三、學生修讀所屬學院之「學院共同課程」應認列為本系專業課程學分；修讀所屬學院之「學院跨領域課程」或其他學院開課之課程，則認列為外系課程學分。
- 四、系所訂定條件（學程、檢定、證照、承認外系學分及其他）：
 - （一）研究生至少應修滿 24 學分及論文 6 學分。為研究需要，經所長核可得修大學部所開課程，但所修學分數不計入研究所畢業學分數內。
 - （二）在學期間，論文只需選課一次。論文六學分一次修畢，通過學位考試方登錄成績。
 - （三）本所碩士班研究生選修本所以外之課程，需與本所專業科目相關及碩士以上等級為限，且需經指導教授及所長同意，始得抵免本所選修課程學分，跨所選修上限為 10 學分。
 - （四）二年級「專題討論（三）、（四）」課程，除原校內修課方式外，亦可選擇至業界研習之方式。研究生至業界研習須經論文指導教授同意，且內容需與論文相關並須於修課前一學期檢附計劃書，說明合作研究機構或廠商與研究內容及理由等資料，提送系所務會議審議通過。研究生選擇至業界研習，該課程指導及成績均由指導教授負責且不另支鐘點費。

Notes:

- 1.Minimum credit required to graduate: 30 .
- 2.Required courses: 14 credits; elective courses: 16 credits.
- 3.Credits earned by students from the common courses offered by their respective colleges shall be accepted as their affiliated department's professional courses. However, credits earned from interdisciplinary courses offered either by their college or by other colleges will be accepted as credits earned from departments outside their own.
- 4.Departmental requirements (Ex: programs, certifications, licenses, recognition of external department credits, and other requirements):
 - (1) Graduate students must complete at least 24 credits and 6 credits for their thesis. For research purposes, with the approval of the Chair, students may take undergraduate courses, but the credits completed will not be included in the credits for graduation.
 - (2) During the semester, students only need to take thesis course once. The 6 thesis credits must be completed at one time, and grades will only be recorded after passing the degree examination.
 - (3) Graduate students in the master's program who wish to take courses outside the department must ensure that the courses are relevant to their field of study and at the master's level or above. This requires the consent of both the advisor and the Chair. Up to 10 credits can be counted from cross-departmental elective courses.
 - (4) For the second-year "Special Topics Discussion (3) and (4) courses, students also can choose to participate in industry internships in addition to the original course format. Participation in industry internships must be approved by the thesis advisor, and the content must relate to the thesis. A project proposal must be submitted at least one semester prior to enrollment, detailing the collaborating research institution or company and the reasons for the internship. This proposal must be reviewed and approved in departmental meeting. If students choose to participate in industry internships, the supervision and grading of the course will be the responsibility of the thesis advisor, and no additional payment will be provided for this advisor.