National Taiwan Ocean University

030B-Department of Bioscience and Biotechnology (For the academic year 2024; Admission Status: International Students)

Subject category	Subject name	Credit points	Cross-disciplinary subjects	First academic year		Second academic year		Third academic year		Fourth academic year		Fifth academic year		Remarks
				F	S	F	S	F	S	F	S	F	S	
General education courses	Chinese	4	Unlimited	2	2									Simply complete the required credits.
	Introduction to Artificial Intelligence B9M01024	2	Unlimited		2									Required Liberal arts Courses for Freshmen
	Swimming Graduation Requirements B92A12P5	0	Unlimited					0						To meet the criteria, one of the following must be fulfilled: Completion of a swimming course during the academic period. Participation in the university's swimming proficiency test, certified to complete a 50-meter swim by the Physical Education Office. Participation in a swimming competition with recognized proof of participation or achievement from the organizing body. Medical certification indicating inability to engage in swimming activities, specifying the period during which swimming is prohibited or not feasible. This period must exceed the remaining study period for the student in the school.
	English B9B01968、B9B01969	4	Unlimited	2	2									For freshmen, the English course in the first and second semesters each has 2 credits.
	38- Advanced English	2	Unlimited			2								Advanced English in the second year, worth 2 credits (available for

														students from the second year onward).
	English Graduation Requirements B9D03TVS	0	Unlimited					0						According to the English graduation threshold implementation guidelines of our university, students who do not meet the university's English proficiency standards during their academic tenure must provide proof of failure. After review and registration by each department, students must additionally take the "English Enhancement" course (zero credits) to replace the English proficiency test. Graduation is only possible after passing this supplementary course.
	Introduction to Oceanography B9M01Z64	2	Unlimited		2									"Introduction to Oceanography" (2 credits), "Introduction to Artificial Intelligence" (2 credits), and 7 other liberal arts courses (14 credits), totaling 18 credits.
	11- Liberal arts courses	14	4			2,2	2,2	2,2	2					The courses in this field include four major subfields: Humanistic Exploration, Social Dynamics, Technological Innovation, and Cross-Disciplinary Sustainability. A minimum of 2 credits is required for Cross-Disciplinary Sustainability, and up to 4 credits can be recognized for each of the other subfields.

	19- Physical education courses	0	Unlimited	0	0	0	0							Classes are held for 2 hours per week.
Subtotal of general education course credits		28		4	8	6	4	4	2	0	0	0	0	
College required courses	Biology (I) B3B0145P	3	Unlimited	3										Biology is a full-year course.
	Biology Lab. (I) B3B0145Q	1	Unlimited	1										Biology laboratory is a full-year course (2 hours of lab per week).
	General Chemistry (I) B3B01L6L	2	Unlimited	2										General Chemistry is a full-year course.
	General Chemistry (Ⅱ) B3B01L6N	2	Unlimited		2									General Chemistry is a full-year course.
	General Chemistry Lab. (I) B3B01L6M	1	Unlimited	1										General Chemistry Laboratory is a full-year course (3 hours of lab per week).
	General Chemistry Lab. (Ⅱ) B3B01L6P	1	Unlimited		1									General Chemistry Laboratory is a full-year course (3 hours of lab per week).
	Biochemistry (I) B3B0245A	3	Unlimited			3								Biochemistry is a full-year course.
	Microbiology (I) B3B02L6S	3	Unlimited				3							Microbiology (I) is a one-semester course
	Microbiology Lab. (I) B3B02L7T	1	Unlimited				1							The laboratory component lasts 3 hours.
	Biostatistics B3B02463	3	Unlimited						3					Biostatistics is a one-semester course
	Concept of Modern Fisheries B3B02295	2	Unlimited		2									College-required courses cannot be exempted by transfer students, but can be exempted by students transferring between departments.
Subtotal of college required credits		22		7	5	3	4	0	3	0	0	0	0	

Departmental required courses	Programming language and data processing B3B012W0	2	Unlimited	2										Starting from the 106th academic year, freshmen are required to take this course.
	Physics(1) B3B011RB	3	Unlimited	3										Physics is a one-semester course.
	General Physics Lab.(1) B3B011RC	1	Unlimited	1										Physics Laboratory is a one-semester course (2 hours of lab per week).
	Biology (Ⅱ) B3B0145R	3	Unlimited		3									Biology is a full-year course.
	Biology Lab. (Ⅱ) B3B0145S	1	Unlimited		1									Biology Laboratory is a full-year course (2 hours of lab per week).
	Biochemistry (Ⅱ) B3B0245B	3	Unlimited				3							Biochemistry is a full-year course.
	Biochemistry Lab.(I) B3B02448	1	Unlimited			1								Laboratory is 3 hours per week.
	Molecular Biology Lab. B3B020DS	1	Unlimited				1							Laboratory is 3 hours per week.
	Organic Chemistry.(I) B3B0260C	3	Unlimited			3								Organic Chemistry is a full-year course.
	Organic Chemistry(Ⅱ) B3B0260G	3	Unlimited				3							Organic Chemistry is a full-year course.
	Organic Chemistry Lab. .(I) B3B0260D	1	Unlimited			1								Organic Chemistry is a full-year course.
	Organic Chemistry Lab. (Ⅱ) B3B0260H	1	Unlimited				1							Organic Chemistry is a full-year course.
	Seminar (Ⅱ) B3B04I3F	1	Unlimited							1				Seminar (II) in the fourth semester is a compulsory 1-credit course.
	Research Plan in Life Sciences B3B032GF	1	Unlimited					1						Starting from the first semester of the third year, students are required to take the 'Life Science Research'

														course, participate in discussions and meetings in a full-time faculty member's laboratory, present a journal article, and submit a written report.
	Cell Biology B3B02J51	3	Unlimited		3									
Subtotal of departmental required credits		28		6	7	5	8	1	0	1	0	0	0	
Total credits		78		17	20	14	16	5	5	1	0	0	0	
Total required credits		78												
Minimum elective credits		50												
Minimum graduation credits		128												
Note on minimum elective credits		1. Four Major Domains of General Education (14 credits): The curriculum in this field includes four major sub-domains: Humanistic Exploration, Social Dynamics, Technological Innovation, and Cross-Disciplinary Sustainability. A minimum of 2 credits must be completed in Cross-Disciplinary Sustainability, and each domain can be credited for a maximum of 4 credits. 2. First-Year General Education Requirements (4 credits): "Introduction to Oceanography" and "Introduction to Artificial Intelligence," each worth 2 credits. 3. First-Year English (4 credits) and Second-Year Advanced English (2 credits): First-Year English consists of 2 credits per semester. Advanced English is worth 2 credits and can only be taken from the second year onward. For international students, a total of 4 credits in foreign language courses must be completed. Students from English-speaking countries are required to take foreign language courses in a language other than their native language.												
Note on minimum graduation credits		Students in this department are required to complete a minimum of 128 credits for graduation. If required courses or program-specific courses need to be retaken or completed in summer sessions, they must be retaken in the same department where the course is classified as a compulsory course. The retaken course must have the same number of credits and hours. For full-year courses, students must retake the full-year version of the course to have the retake credits recognized. Foreign Language Requirements: There is no credit limit for advanced foreign language electives. The English graduation threshold for this department is: (1) A TOEIC score of 600 or an equivalent score in other recognized tests. (2) Students must first take the English proficiency test and provide the score report. Those who pass will meet the English graduation requirement. Those who do not pass must take an additional 2-credit intermediate English course, which will count toward graduation credits.												

	(3) Please note that the university's TOEIC standard is 550.
Remarks	For students pursuing a dual major with the Department of Biological Sciences: 1. Must complete the department's required courses: "Life Science Research and Special Topics (I)" and two research capability development courses, which are only offered by the Biological Sciences department. 2. The applicable required course list is based on the year the dual major application is approved. 3. Exemption courses should be consistent in credits, hours, and content. 4. From the academic year 106 (inclusive) onwards, two new elective courses—"Physiology" (3 credits) and "Genetics" (3 credits)—are considered equivalent to required courses for students applying for the dual major. 5. General Education Courses: "The curriculum in this field includes four major sub-domains: Humanistic Exploration, Social Dynamics, Technological Innovation, and Cross-Disciplinary Sustainability. A minimum of 2 credits is required for Cross-Disciplinary Sustainability, and each sub-domain can be credited up to 4 credits.