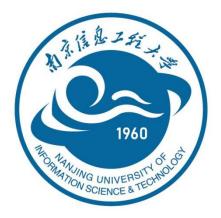南京信息工程大学
Nanjing University of Information Science & Technology

Syllabus of

Top-notch Talents Cultivation for ***

（2024 Edition）

Complied by the Office of Academic Affairs

2024

Introduction

1. Major of top-notch talents cultivation: This syllabus comprises a variety of scientific, industrial and joint training education models of developing talents from majors of atmospheric science, computer science and technology, mathematics and applied mathematics and artificial intelligence industry, the joint training class of the University of China Academy of Sciences and the University of China Academy of Social Sciences, the experimental class of Huawei, Tencent, Jingdong and Piesat, the class of Qi 'An Xin, the Guodian Nanjing Automation Co.,LTD and Hikvision etc.

2. Principle of the revision: The syllabus should strengthen the foundation of subject, focus on academic innovation, improve comprehensive literacy, and align with international standards.

3. Classroom teaching reform: The syllabus emphasizes individualized teaching, small class teaching and strengthens the reform of teaching methods such as heuristic, seminar-based, project-based, case-based and blended teaching, flipped classroom, online learning, and problem-based learning and strengthens the assessment of the learning process so as to focus on training students' abilities to think, explore and innovate.

4. Knowledge system of course: According to the category, nature, and content of the course, it is systematically designed to build an innovative, high-level and challenging course knowledge system with coherent logical relationships, advanced knowledge system and rich teaching content.

5. Courses covering undergraduates and postgraduates: This syllabus aims at motivate reform and set up modules integrating undergraduates, postgraduates and doctoral students level at suitable programs and experimental class, in order to enhance education quality with more creative experts in natural sciences and humanities.

Contents

《   》Syllabus

1. Basic Information

Course Name (Chinese)					
Course Name (English)					
Course Type[1]:		Course Type[2]		Language of Instruction[3]	
Academic Semester			Credits		
Academic Hours and Schedule	Total Hours[4]	Theory Hours	Practice Hours	Extracurricular Hours	
Majors Applicable					
Textbooks					
School					
Prerequisite Courses					
Follow-up Courses					
Course Introduction	**Basic Course Orientation**: (Describe the position of the course in professional talent training) **Core Learning Outcomes:** (Represent the core teaching objectives of the course) **Main Teaching Methods:**				
Syllabus Update					

Note: 1.Course Type: Core Courses of General Knowledge / Development Courses of General Knowledge / General Elective Courses / Basic Courses / Main Major Courses / Elective Major courses / Professional Practice / Quality Development / Undergraduate and Postgraduate courses;

2.Course Type: Elective / Compulsory;

3.Language of Instruction: Chinese, English or other languages;

4.For centralized practise or curriculum design practice, teaching hours are recorded by week.

2. Course Objectives

Number	Course Objectives (Accordance with Cultivation Objectives, Graduation Requirements and	Related Graduation Requirements Index Points [1]	Approaches to Achieve

	Course Orientation)		
1.			
2.			
……			

Note: 1.Related Graduation Requirements Index Points: Optional items. Professional certification is required. Courses with reference points of graduation requirements must be filled in, if not, please keep it blank.

3. Theoretical Teaching Content

Chapter Number	Teaching Contents	Academic Hours	Elements of Ideological and Political Education[1]	Expected Learning Outcome [2]	Teaching Methods[3]	Course Objectives
Chapter 1	1.					
	2.					
	……					
Chapter 2	1.					
	2.					
	……					
Chapter N	……					

Note：1. Elements of Ideological and Political education：Write at least 3 points outlining the knowledge that integrates professional education with ideological and political education in this course (the same below). The major's requirements of ideological and political education referred to mainly including two parts: traditional spirit and age value. Traditional spirit includes: (1) national righteousness; (2) loyalty and patriotism; (3) continuous self-renewal; (4) integrity and friendliness; (5) integration of knowledge and action (the above 5 points can be set according to the characteristics of each major, but not limited to 5). Age value includes: (7) prosperity and democracy; (8) Civilization and harmony; (9) freedom and equality; (10) justice and the rule of law; (11) scientific truth; (12) people first (the above 6 points can be set according to the characteristics of each major, but are not limited to 6);

2.Course expectations: describe the knowledge, abilities, or literacy that students should acquire after completing this section (the same below);

3.Teaching methods: including lecture, discussion, case study, demonstration, flipped classroom, etc, but not limited to the listed ones. Please fill in according to the actual requirement of the course.

4. Practical Teaching

(1) Course Experiment[1]

Project Number（Course Number +Serial Number）	Project Name	Experiment Contents	Corresponding Chapters	Academic Hours[2]	Experiment Type[3]	Elements of Ideological and Political Education	Expected Learning Outcomes	Course Objectives
…								

Note: 1. This table is used for experimental teaching courses;

      2. In principle, fill in 2 or 3 project hours;

      3. Experimental type: select "demonstration/validation/comprehensive/design".

(2) Practice and Training[1]

Number	Content	Type[2]	Places[3]	Elements of Ideological and Political Education	Expected Learning Outcomes	Course Objectives	Schedule (Days)
1.							
2.							
……							
Total							

Note: 1. This table is used for centralized practise and training courses;

      2. Practice type: select "cognition practice/production practice/graduation practice/course practice";

      3. Practice location: Select "classroom, laboratory, outdoor, off-campus institution".

(3) Course Design[1]

Number	Title/Task	Main Content	Schedule[2]	Expected Learning Outcomes	Course Objectives
1.					
2.					
……					

Note: 1. This table is used for practical courses and graduation projects (thesis) related to XXX Course Design;

    2.Please arrange the schedule in weeks or hours.

5. Course Evaluations

(1) Evaluation Details, Evaluation Type and Proportion

Course Objectives	Evaluation Details	Percentage of Evaluation Type[1]				
		Usual Performance	Homework and In-class Assignments	Midterm Exam	Final Exam	……
1.		50%	60%	30%	45%	
2.		50%	40%	70%	55%	
……		……	……	……	……	
Total		100%	100%	100%	100%	
Weight of Evaluation Type （Self-assignment）		10%	10%	20%	60%	

Note: 1. Evaluation type and proportion: mainly based on the course objectives, design and develop diversified

    assessment types. The listed assessment types are for reference only (data in gray color can be deleted) and

    must cover all students and can be adjusted according to the specific teaching situation of the current

    semester;

    2. Weight of each evaluation type in total: assign values to the weight of each evaluation type in total based on the

    actual situation of the course;

    3. Evaluation modules are set up to evaluation type based on the actual situation of the course, highlighting process

    evaluation and diversified evaluation.

(2) Criteria of Evaluation Type

1．Criteria of Homework and In-class Assignments

Course Objectives	Criteria					Percentage
	90-100 A	80-89 B	70-79 C	60-69 D	0-59 E	
1.						
2.						
3.						
……	……	……	……	……	……	

2．Criteria of midterm/final exam (criteria of written exam can be explained in the syllabus in the following format, or can be explained through the "exam analysis form")

Course Objectives	Criteria					Percentage
	90-100 A	80-89 B	70-79 C	60-69 D	0-59 E	
1.						
2.						
3.						
……	……	……	……	……	……	

Note: The percentage of evaluation types and course objectives should be consistent with "(1) evaluation details, evaluation types, and the corresponding relationship with course objectives". All evaluation types listed, except for written exams, must provide criteria in sequence, with the same format as above. The criteria for written exams can be explained in the syllabus or by submitting an "exam analysis form".

6. Bibliography and Course Materials

1.

2.

……

Designed by :   **Examined by：**   **Approved by:**

                                                    Month   Day   Year