Freshman Seminar

Course Information					
Name	Freshman Seminar				
School	Qingdao Institute of Software, College of Computer Science and Technology				
Credits	1.0	**Hours**	16	**Language**	English
Description	Freshman seminar is a course in the form of small class discussion for freshmen. It has two functions of adaptability and academic guidance, and is a professional compulsory course. Generally taught by well-known teachers with profound academic attainments and rich teaching experience in the professional field. The teaching goal of the course is to guide students to adapt to university life and change their learning methods, enhance professional and academic understanding, cultivate professional learning and academic exploration interest, and lay a good foundation for undergraduate and higher-level learning and research. At the same time, it explores a research-based teaching method based on exploration and research, teacher-student interaction, and stimulating students' autonomous learning. The main teaching contents include:(1) how to adapt to the life and learning environment of the university and enter the learning and academic state of the university as soon as possible;(2) introduce the professional connotation and discipline prospect, strengthen the professional and discipline cognition, broaden the professional vision, and cultivate students' professional learning interest and academic curiosity;(3) focus on the key contents and research hotspots of the major and discipline, combined with practical research and application fields, for topics of common interest to teachers and students, various forms of discussion are carried out from the perspectives of "history, present and future. The teaching method highlights the interaction between teachers and students, research and discussion, and guides and encourages students to actively communicate, think independently and analyze deeply. The course assessment does not take the form of a paper, but a comprehensive evaluation based on students' participation, performance, reports, etc.				

Learning Outcomes	
No.	**Outcomes Description**
1	Objective 1: Help students adapt to the life and study of the university as soon as possible, understand the professional connotation, have an overall understanding of the professional learning requirements, understand the subject and professional status, learning, development, employment, continuing learning and other information and opportunities, and plan the university's study life and future development.
2	Objective 2: Make students have a preliminary understanding of the academic direction, research and application hotspots and trends of professional disciplines, inspire students to understand and think about relevant professional knowledge, stimulate students' interest, enthusiasm and initiative in learning and researching majors, and improve academic awareness and academic curiosity.
3	Objective 3: Create an open and communicative learning atmosphere, and cultivate and exercise students' problem awareness and autonomous learning ability through inspiration, guidance and discussion-style teaching.
4	Objective 4: Have basic literature retrieval, reading, summary, communication and other abilities.

Topics

No.	Title	Content
1	Understanding Universities and Majors	(1) Understanding Universities and Majors (2) What do you learn? Training programs (objectives, requirements, courses, including experiments and practical links); The relationship between courses and their position, knowledge and ability in the curriculum system. (3) How to learn? Direction and course selection; Classroom and extracurricular; Theory and practice; Compulsory and elective courses; Assessment and achievement; Style of study and class style; (4) Guidance and Suggestions According to the existing outstanding problems, targeted guidance should be given in learning and academic aspects.
2	Academic Career and Career Planning	(1) Objectives (2) Program and planning (3) Thinking and action [Curriculum Ideological and political integration point] Establish a correct outlook on life and values; learn for the great cause of national rejuvenation, and be "honest, pragmatic, and down-to-earth"; positive, optimistic, and upward.
3	"card neck" technology in the computer field	(1) hardware: chip manufacturing (2) Software: Operating System (3) How big is the gap? (4) Foundation and Innovation [Course Ideological and Political Integration Point]
4	Software Engineering	(1) Software applications (2) Turing Machines and Computational Complexity (3) the charm of the algorithm (4) Classical algorithm
5	Computer Networks	(1) The Definition of Computer Networks (2) Basic content and technology of computer networks (3) Computer Network Protocols and Applications
6	Computer Vision	(1) Key Technologies of Image Processing (2) Research hotspot (3) Typical applications
7	Cloud Computing	(1) Network and Distributed Computing (2) Key technologies of cloud computing (3) Typical applications
8	Artificial Intelligence	(1) Development of Artificial Intelligence (2) Research hotspot (3) Typical applications