

COURSE SYLLABUS
Vocational School

Course Code	Course Name		Credit	ECTS Value
ÇGP 208	Science and Mathematics Education in Preschool		(2-1-3)	6
Prerequisite Courses:	None			
Course Language:	Turkish	Course Delivery Method:	Face-to-face	
Course Type and Level:	Required / Spring Semester 2nd Year / Associate Degree			
Instructor's Title, First Name, and Last Name		Class Time	Office Hours	Contact
Dr. Rana RUDVAN, Assistant Professor		1:25 PM - 3:45 PM	10:00 AM - 4:00 PM	ranarudvan@cag.edu.tr
Course Coordinator:	Dr. Assistant Professor Rana RUDVAN			
Teaching the basic science and math skills and concepts that need to be addressed to support children's cognitive development in the preschool period, how these concepts can be taught to children, how activities related to these concepts can be planned, how activities can be included in the daily schedule, enabling children to receive science and math education through project-based teaching, providing science and math education in nature using natural materials, and most importantly, developing the child's interest, love, and curiosity in mathematics and science.				
Course Learning Outcomes	Students who successfully complete this course will be able to:		Relationships	
			Program Outcomes	Net Contribution
	1	Explains the importance and characteristics of preschool science and mathematics education,	1,2	4,5
	2	Knows how to plan and organize the science and mathematics center in preschool education,	1,2	5.5

	3	Explains the basic skills and concepts that should be taught to children in preschool science and mathematics education and the order in which they should be taught,	4.5	5.4
	4	Plans activity examples related to the fundamental skills and concepts in preschool science and mathematics education,	5.6	5.5
	5	Prepares sample materials related to preschool science and mathematics activities,	8	4
	6	Knows how to integrate science and math activities with daily life and other activities in the program,	3,4,8,10,9	4,5,5,4,5
	7	Knows the teaching methods and techniques commonly used in preschool science education.	6,3	4

Course Content: (Weekly Lesson Plan)

Week	Topic	Preparation	Teaching Methods and Techniques
1	Introduction to the Course Scope and Content of Science and Mathematics Education in Preschool	Students bring a small object that represents themselves and symbolizes a childhood memory.	Warm-up/icebreaker games, drama activities, group discussion
2	The Place of Science and Mathematics Education in the Curriculum, Environment, Teacher's Role	Prepares an example photo or short story from daily life related to drama concepts (improvisation, role-playing, acting).	Brainstorming, concept map, role-playing

3	Understanding Science in the Preschool Period, Inquiry-Based Science Education, and Critical Thinking Skills	Finds and brings a short article or news story demonstrating the importance of creative drama in education.	Case study, small group discussion, interactive presentation
4	Inquiry-Based Science Education - Social Responsibility Project Writing Determining Groups	Students research examples of drama activities for different age groups.	Role-playing, group poster preparation, discussion

5	Teaching in Natural Environments	Select an activity video from art, music, or theater and take brief notes.	Multimedia analysis, creative music-movement work, interdisciplinary drama
6	Field Trips	Select a story or fairy tale and write a brief summary according to the "beginning-development-conclusion" stages.	Station technique, step-by-step dramatization, peer feedback
7	Raising Creative Children Through Science and Mathematics Education	Students prepare a visual or brief explanation about a drama technique (e.g., frozen image, hot seat).	Freeze frame, hot seat, improvisation
8	Midterm Exam	-	-
9	Midterm Exam	-	-
10	Concept Maps, Analogies, Experiments in Science Education	Adapt a short children's story for drama and suggest a stage flow.	Role-playing, improvisation, feedback session
11	The Concept of Sustainability in Science Education	Prepares a simple observation form for a drama activity.	Problem-based learning, forum discussion, evaluation cards
12	Project in Science Education	Expands the previous plan by adding family participation and materials.	Scenario development, application workshop, peer observation
13	Matching, Classification, Comparison, Grouping in Mathematics Education	Brings the necessary materials for the final drama activity as a group.	Workshop, product sharing, joint performance
14	Number, Operations, Spatial Perception, Geometric Shapes, Measurement, Graphs in Mathematics Education	Suggests costumes/accessories appropriate for the selected story for in-class application.	Full-process drama, improvisational performance, group presentation

15	Material Production with Small Groups	Students bring recycled materials (cardboard, lids, fabric pieces, etc.).	Workshop, collaborative learning, hands-on activity
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16	Group Presentations of Social Responsibility Projects - Participation Certificates	Groups prepare their social responsibility projects in the form of a report and presentation file.	Presentation, peer assessment, Q&A
17	Final	-	-
18	Final	The end-of-term portfolio submission is made.	-

Course Resources

Textbook:	Lecturer's course notes
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Course Assessment and Evaluation

Activities	Number	Contribution	Notes
Midterm Exam	1	20	Written exam
Homework	1	10	Social Responsibility Project Implementation
Presentation	1	10	Group presentation (Social Responsibility)
Participation / In-process activities	14	10	Active participation in discussions, group work, and in-class activities
Final	1	5	Comprehensive written exam

ECTS Table

Content	Number	Hours	Total
Course duration	14	3	42
Out-of-Class Work	14	4	56

Homework	1	10	10
Presentation	1	8	8
Participation / In-Process Activities	14	2	28
Midterm Exam (Midterm Exam Duration + Midterm Exam Preparation)	1	16	16
Final Exam (Final Exam Duration + Final Exam Preparation)	1	20	20
Total:			180
Total / 30:			$180 \div 30 \approx 5.0 \approx 6$
ECTS Credit:			6

Geçmiş Dönem Başarıları

