Course Syllabus Addendum

Your College, Your Future

Established 1969

ECD 133
Science and Math Concepts

Course Instructor	Dr. Monica Stukes
Office Location	256 A
Office Phone	843-355-4128
Email	stukesm@wiltech.edu
Instructor office hours (required for full-time faculty)	M 9:30am-11:00am (Virtual) 1:00pm-3:00pm T 10:00am-12:00pm 12:00pm-1:00pm (Virtual) W 9:00am-11:30am TH 8:00am-10:30am

Course Number	ECD 133	**Section Number**	15
Course Title	Science and Math Concepts		
Credit Hours	3		
Teaching philosophy/ methods	This course includes an overview of pre-number and science concepts developmentally appropriate for young children. Emphasis is on the planning, implementation, and evaluation of developmentally-appropriate activities utilizing a variety of methods and materials		
Course Objectives	1. Utilize appropriate media, materials, techniques, and methods during development of science and math activities. (NAEYC 4b, 4 c, 5a, 5c) 2. Evaluate age appropriate science and math activities. (NAEYC 4b) 3. Integrate science and math activities into various areas of the preschool program. (NAEYC 1c) 4. Create and demonstrate science and math experiences that are important and relevant to preschool children. (NAEYC 4b, 4c, 5b, 5c)		
Materials specific to Course Section	Math and Science Concepts for Young Children 8th Edition by Rosalind Charlesworth		

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	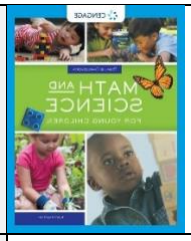
Classroom standards for behavior (Attendance, tardiness, late work, Cheating, online etiquette as applicable)	**Attendance Policy** Attendance and participation are necessary for academic success. Williamsburg Technical College (WTC) expects students to attend all scheduled class meetings. WTC requires students to be present a minimum of 80% of all class lectures and laboratory sessions. Once a student has missed 20% of the course or two consecutive weeks, the faculty is obligated to withdraw students from the course. Individual programs may set higher required attendance and tardy standards, but must include these standards in their course syllabus and announce the requirements during the first two class meetings. Instructors will be given the flexibility to work with students in good standing who provide documentation to support a legitimate reason for an absence. It is the responsibility of the student to make up all missed class assignments within the time frame set by the instructor. Classroom Attendance In order to be successful in this class, students should be in class and attend all schedule meetings. Students are given five absences. Every absence after the fifth may result in the drop of one letter grade. If a student is going to be absent, please email the instructor using your student email. Students who are absent are responsible for any and all make-up work and tests. Please be on time in coming to class. Students who are ten minutes late, or more, may be counted as absent for that class. Work that is turned in late will be subject to a one letter grade penalty for every day that it is late. If a student is absent on the day a test is given, they will receive a zero for that test unless made up within 2 weeks. Online Attendances Students taking an online/internet class must sign-in and complete an assignment designated by the instructor within the week or class from the start of the semester to indicate attendance in the class. Students not attending class during the first two weeks (first ten calendar days) from the start of the semester must be dropped from the class for NOT ATTENDING. For all online courses, students must complete and assignment designated by the instructor during the first week of classes. The instructor will drop the student from the course if the initial assignment is not completed. Instructors will withdraw students from the class when 90% attendance is not maintained. Attendance in an online course is defined by regular course access and by timely completion of assignments as required by the instructor. Each student will be expected to access the web class at least once a week and complete 90% of assignments on time. Additional access is encouraged and may be necessary for successful completion of classes. Failure to log in and complete assignments will result in the student being withdrawn from the course. The instructor will assign a grade of "W" or "WP" based upon the student's academic standing as the date of attendance, which is the

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	last login. Students are responsible for any financial matters associated with an administrative withdrawal. If a student fails to email the instructor (using the WTC email account) requesting to be dropped from the course and has not submitted the initial assignment required during the first week of class, the instructor will assign a "Never Attended" code no later than two weeks (ten calendar days) after the first day of class. Students who are dropped as a result of never attending the course are still responsible for all fees associated with the course. Students must attend 90% of class meetings to complete the course with a passing grade. Missing 10% of class meetings will result in withdrawal from the course. **Academic Misconduct Policy** Any student suspected of academic dishonesty will be reported to the VP of Student Services for investigation and subsequent disciplinary action in accordance with college policy. Academic dishonesty includes, but it not limited to, falsification of information, cheating on test, plagiarism (copying other's work representing it as your own – in part or in total – without the appropriate citations) and collusion. Please do not make or answer cell phone calls during class. Also, please do not allow phones to ring during class. All phones should be set to vibrate or silent and should not be visible at all. Students that exhibit behavioral problems will be sent to the VP of Student Services for corrective action. The instructor reserves the right to remove from the class any student who is disruptive. **Student with Disability Policy:** Williamsburg Technical College encourages students with disabilities to contact his or her instructor to discuss needs and concerns as they arise. If you feel you have a disability requiring accommodations, contact Student Services. Also, please see me within the first two weeks of class. **Late Work:** All course work (including, but not limited to: assignments, labs, quizzes, exams, and final projects) must be submitted no later than the due date unless prior arrangements are made with the instructor and a new due date is established. If a student submits an assignment after the due date without having decided with the instructor, a minimum of 5 points, (based on an assignment grading scale of 100 points), will be deducted for each week, or part thereof, that the assignment is late.
Suggested additional readings if applicable	

Weekly assignment schedule with due dates of major assignments, tests, projects, etc.	**Dates**	**Calendar Events**	**Content**	**Due Dates (All due dates on Sunday night unless otherwise stated)**
	Week 1	Introductions, Syllabus, Course Overviews Math and Science Concept for Young	Course Syllabus	08/24/25

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		Children, in Edition		
	Week 2	Chapter 1 &2 Key Terms Review Question Ch.1 (Short Essay): What are communalities between science and math? Review Question Ch. 2 (Short Essay): Why is it important to consider individual and cultural learning styles when planning instruction for young children?	Ch. 1: How concepts Develop Ch. 2: How concepts are Acquired	08/31/25
	Week 3	Chap. 3 Key Terms. Review Question Ch. 3 (Short Essay): What is heuristic and its significance for mathematic problem solving?	Ch. 3: Promoting Young Children's Concept	09/07/25
	Week 4	Chapter 4 Key Terms Review Question Ch. 4 (Short Essay): Why is it important to make assessment the first step in teaching?	Ch. 4: Assessing the Child's Developmental Level	09/14/25
	Week 5	Chapter 5&6 Key Terms Review Question Ch. 5 (Short Essay): How does the knowledge	Ch. 5: The Basics of Science Ch.6: How Young Scientists Use Concept	09/21/25

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		explosion affect the science taught to young children? Review Question Ch. 6 (Short Essay): List (3) is the three major part of the learning cycle.		
	Week 6	Chapter7 Key Terms Review Question Ch. 7 (Short Essay): What is the difference between narrow and open-ended questions, and how is each one used? **Science Activity File Due**	Ch. 7: Planning for Science	09/28/25
	Week 7	Chapter8 &9 Key Terms Review Question Ch. 8 (Short Essay): How would you define one-to-one correspondence when talking with a parent? Review Question Ch.9 (Short Essay): What is the relationship between rote and rational counting?	Ch.8: One-to-One Correspondence Ch.9: Number Sense and Counting	10/05/25
	Week 8	Chapter 10, 11, & 12 Key Terms Review Question Ch. 10 (Short Essay): What does it	Ch. 10 :Logic and Classifying Ch. 11: Comparing Ch. 12: Early	10/12/2

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		mean by the terms logical group and classification relate those definition to the NCTM and Common Core expectations. Review Question Ch. 11 (Short Essay): Give two example of naturalistic, informal, and adult-guided comparison activities. Review Question Ch. 12 (Short Essay): What are some example of shape discrimination, shape labeling, shape matching, and shape sorting	Geometry: Shape	
	Week 9	Chapter 13 & 14 Key terms Review Question Ch. 13 (Short Essay): How can a teacher assess children concepts of space by observing their play? Review Question Ch. 14 (Short Essay): What is a type of experiences and activities that support a child's development of concept of parts	Ch.13:Early Geometry: Shape Ch. 14: Parts and Wholes	10/19/25

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		and wholes?		
	Week 10	Chapter 15 & 16 Key Terms Review Question Ch. 15 (Short Essay): How does language learning relates to science and mathematics concept learning? Review Question Ch. 16 (Short Essay): How would you evaluate children's learning? **Teacher Made Materials Due**	Ch. 15:Language and Concept Formation Ch. 16: Fundamental Concept	10/26/25
	Week 11	Chapter 17 Key Terms Review Question Ch. 17 (Short Essay): What is the major characteristics of ordering /seriation?	Ch. 17:Ordering, Seriation, and Patterning	11/02/25
	Week 12	Chapter 18 Key Terns Review Question Ch. 18 (Short Essay): What is the (5) five stages of measurement, and describe each of the (5) five stages of development?	Ch. 18: Measurement: Volume, Weight, Length, and Temperature	11/09/25
	Week 13	Chapter 19 Key Terms Review Question Ch. 19 (Short Essay): What is time	Ch. 19:Measurement: Time	11/16/25

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		sequence? What is time duration? **Math Activity File Due**		
	Week 14	Chapter 20 Key Terms Review Question Ch. 20 (Short Essay): What is the Importance of graph making?	Ch. 20: Interpreting Data	11/23/25
	Fall Break	Fall Break		11/26-11/30/25
	Week 15	Chapter 21 Key Terms Review Question Ch. 21 (Short Essay): How would you teach measurement to young children? **Unit Lesson Plan Due** **Final Exam Review**	Ch. 21: Application of Fundamental Concepts in Preprimary Science	12/05/25
	Week 16	Final Exam	Final Exam	Dec. 5-10
Last date to drop with a grade of "W"	**October 20, 2025**			
Addendum Revision date	08/15/2025			
Missed work	Students with documented evidence of an emergency which prevented prior communication with the instructor may present documentation to the instructor for consideration. In order to receive credit for the discussion forum assignments, the student must actively participate during the assigned discussion period. Course work will not be accepted after the last day of the term unless arranged as part of a Course Extension			

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Statement that minor changes (such as order of topics or due dates) will be Announced ahead of time.	**Minor changes will be updated a week ahead of time.**
Course Grading System	**The College operates on the semester hour system, and the following symbols are used in grading:** **A = Excellent** **B = Above Average** **C = Average** **D = Passing** **F = Failure** **I = Incomplete** **WF = Withdrawal while failing** **WP = Withdrawal while passing** **A:** 90-100 **B:** 80-89 **C:** 70-79 **D:** 60-69 **F:** Below 60 Tests Projects Assignments

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Course Requirements

Exams: **400 points**

A total one, each worth 100 points, will be given. Each exam willcover information from the textbook, course lectures, discussions, and quizzes, which will test you understanding of the information, covered. The exam dates will be scheduled and the instructor will notify you. Pop quizzes may be given at the discretion of the instructor.

Assignments:

A.) Science Activity File **200 points**

Each student will be required to develop a file of 15 age appropriate science activities. Pages must be numbered and placed in a Notebook binder. Information should be typed and each procedure should be age specified and procedural steps should be identified for carrying out activity with children. Criteria and format will be discussed further in class.Activities from this file may be used for lab activities and for teacher-made.

B) Math Activity File **200 points**

Each student will be required to develop a file of 15 age appropriate math activities. Pages must be numbered andplaced in a Notebook binder. Information should be typedand each procedure should be age specified and procedural steps should be identified for carrying out activity with children. Criteria and format will be discussed further in class. Activities from this file may be used for lab activities and for teacher-made.

C) Teacher Made Materials **100 points**

Each student will be required to make two (2) science and two (2) math teaching "games" or activities. Criteria: Each student will be required to title each teacher made activity. Each activity will be age specified and proceduralsteps should be identified on an index card and attached to teacher made in a professional manner. Laminate ifpractical to project.

) Unit Lesson Plan **100 points** Reflecting on practice to promote positive outcomes foreach child, you will be required to develop a unit lessonplan, using developmental knowledge to create healthy,respectful, supportive, and challenging learningenvironments for young children.

The unit lesson plan should provide content knowledgeand resource in

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academic disciplines, language, art, music, creative movement, physical activity, health and safety, social studies, appropriate early learning standards, resources to design, implement, and evaluate developmentally and challenging unit lesson plan for eachchild.(Standard le, 4d, Sa, Sc)