Course Description
This course includes an overview of pre-number and science concepts developmentally appropriate for young children. Emphasis is on the planning, implementation, and evaluation developmentally appropriate activities utilizing a variety of methods and materials. This 3 credit hour course consists of 2 lecture hours per class (2 credits) and 3 lab hours (1 credit) in various childcare settings.

Prerequisites: ECD 101, MAT 032, MAT 012, RDG 100.

3.0 Cr (2.5 lect/pres, 1.5 lab, 0 other)

Course Focus
This class is an overview of pre-science, pre-mathematical, and related concepts and understandings important to the complete development in young children. Emphasis will be placed on planning, implementing, and evaluating appropriate age science and math activities utilizing a variety of methods, materials and techniques.

Text and References
Authors, Rosalind Charlesworth and Karen K. Lind
Title, Math & Science for Young Children, 5th Edition
Publisher, Thompson Delmar Learning
City of Publication, Clifton Park, NY
Year of Publication, 2007

Course Goals
The following list of course goals will be addressed in the course. These goals are directly related to the performance objectives. (*designates a CRUCIAL goal)

1. Define concept development
2. Discuss math and science commonalities
3. List learning experiences types
4. Analyze math science technology
5. Explain instruction steps
6. Assess DA problem solving assessment
7. Assess DA problem solving instruction
8. Present math science game
9. Present math science parent pack
10. Determine concept development level
11. Make developmental assessment task file
12. Share portfolio assessment advantages
13. Locate science instruction areas
14. Identify appropriate early childhood science topics
15. Perform math related cooking activity
16. Plan five process science skill lessons
17. Define self regulation process
18. Construct unit planning web
19. Construct evaluation strategies
20. Share simple science experiment
21. Describe one to one correspondence
22. Explain number sense counting
23. Interpret rote counting
24. Interpret rational counting
25. Discuss classifying activity
26. Teach five classifying criteria
27. Recognize comparing concepts
28. Analyze naturalistic informal structured shape activities
29. Describe five spatial sense concepts
30. Perform structured spatial activity
31. Write three types part whole relationship
32. Perform structured part whole activity
33. List math science literacy instruction philosophy
34. Define ordering seriation
35. Define patterning
36. Discuss measurement development stages
37. Demonstrate time three ways
38. Create three stage graphs
39. Incorporate math science standards to integrated curriculum
40. Make six number symbol skill activities
41. Describe whole number addition subtraction multiplication division operations
42. Complete lab orientation
43. Conduct weekly lab site observations
44. Write weekly lab observations
45. Exhibit professional ethics
46. Participate actively in community projects
47. Participate professionally in community projects
48. Utilize professional internet resources
49. Develop patterning activities
50. Make appropriate fraction activities
51. Identify place value renaming
52. Identify place value regrouping
53. Read basic geometry concepts
54. List measurement types

Student Contributions
For this course to run properly, the student is expected to be prepared for each class, including, but not limited to, reading assignments, class activities, weekly lab observations and class participation. Attendance is a great contributor to student success in this course.

Course Evaluation
Creation and presentation of Math or Science related game - 200 points
Midterm Exam - 50 points
Final Exam - 100 points
Family pack activity - 100 points
Presentation of cooking activity with lesson plan - 200 points
Present science experiment - 100 points
Weekly lab observations - 100 points
Conceptual framework = 150

900 - 1000 = A
800 - 899 = B
700 – 799 = C
600 - 699 = D
599 and Below = F

Course Schedule
This course consists of 2.5 lecture hours per week and 1.5 lab hours at various childcare centers per week.

Developed/Revised: 10-11-2010

ADA STATEMENT
The Technical College of the Lowcountry provides access, equal opportunity and reasonable accommodation in its services, programs, activities, education and employment for individuals with disabilities. To request disability accommodation, contact the counselor for students with disabilities at (843) 525-8228 during the first ten business days of the academic term.

ACADEMIC MISCONDUCT
There is no tolerance at TCL for academic dishonesty and misconduct. The College expects all students to conduct themselves with dignity and to maintain high standards of responsible citizenship.

It is the student’s responsibility to address any questions regarding what might constitute academic misconduct to the course instructor for further clarification.

The College adheres to the Student Code for the South Carolina Technical College System. Copies of the Student Code and Grievance Procedure are provided in the TCL Student Handbook, the Division Office, and the Learning Resources Center.

ATTENDANCE
The College’s statement of policy indicates that students must attend ninety percent of total class hours or they will be in violation of the attendance policy.
• Students not physically attending class during the first ten calendar days from the start of the semester must be dropped from the class for NOT ATTENDING.
• Students taking an online/internet class must sign in and communicate with the instructor within the first ten calendar days from the start of the semester to indicate attendance in the class. Students not attending class during the first ten calendar days from the start of the semester must be dropped from the class for NOT ATTENDING.
• Reinstatement requires the signature of the division dean.
• In the event it becomes necessary for a student to withdraw from the course OR if a student stops attending class, it is the student’s responsibility to initiate and complete the necessary paperwork. Withdrawing from class may have consequences associated with financial aid and time to completion.
• When a student exceeds the allowed absences, the student is in violation of the attendance policy. The instructor MUST withdrawal the student with a grade of “W”, “WP”, or “WF” depending on the date the student exceeded the allowed absences and the student’s progress up to the last date of attendance or under extenuating circumstances and at the discretion of the faculty member teaching the class, allow the student to continue in the class and make-up the work. This exception must be documented at the time the allowed absences are exceeded.
• Absences are counted from the first day of class. There are no "excused" absences. All absences are counted, regardless of the reason for the absence.
  ▪ A student must take the final exam or be excused from the final exam in order to earn a non-withdrawal grade.
  ▪ A copy of TCL’s STATEMENT OF POLICY NUMBER: 3-1-307 CLASS ATTENDANCE (WITHDRAWAL) is on file in the Division Office and in the Learning Resources Center.

HAZARDOUS WEATHER
In case weather conditions are so severe that operation of the College may clearly pose a hardship on students and staff traveling to the College, notification of closing will be made through the following radio and television stations: WYKZ 98.7, WGCO 98.3, WGZO 103.1, WFXH 106.1, WWVV 106.9, WLOW 107.9, WGRZ 104.9, WFXH 1130 AM, WLH 101.1, WSOK 1230 AM, WAEV 97.3, WTOC TV, WTGS TV, WJWJ TV, and WSAV TV. Students, faculty and staff are highly encouraged to opt in to the Emergency Text Message Alert System. www.tcl.edu/textalert.asp

EXTRA:

Emergency Text Message Alert
Students, faculty and staff are highly encouraged to opt in to the Emergency Text Message Alert System. Participants receive immediate notification of emergency events and weather cancelations via text messaging on their cell phones. Participants can also opt in to receive non-emergency news and announcements. Go to www.tcl.edu. On the homepage, click on “emergency TextAlert at TCL” and fill out the form or go to www.tcl.edu/textalert.asp

BROADCAST LEARNING FORMAT: This class is being taught in a broadcast learning format. Images and word of class participants may be transmitted live or on a delayed basis to other locations. Classes may be rebroadcast due to extenuating circumstance.
GRADING METHODOLOGY
The final grade must be 70 or more (a grade “C” or better) in order to pass the course and progress to the next course. Students absent from an examination or presentation will receive a “0” grade for the examination unless other arrangements are made with the individual instructor prior to the examination or presentation day or on the examination or presentation day before the test/presentation is scheduled to be given.

The student is responsible for notifying the instructor for the reason of the absence. It is also the responsibility of the student to contact the appropriate instructor to arrange to make up the examination. Arrangements may be completed by telephone.

If the instructor is not available, a message should be left on the instructor’s voice mail AND with another member of the faculty or administrative assistant. The make-up exam will be scheduled and the instructor will decide the method of examination. Messages sent by other students are unacceptable.