



INSTRUCTIONAL PACKAGE

ECD 133

Science and Math Concepts

201930
Summer/2020

INSTRUCTIONAL PACKAGE

PART I: COURSE INFORMATION

Effective Term: Summer 2020

COURSE PREFIX: ECD 133

COURSE TITLE: Science and Math Concepts

CONTACT HOURS: 75

CREDIT HOURS: 3.0

RATIONALE FOR THE COURSE:

This course includes emphasis on planning, implementing, and evaluating age appropriate methods, materials, activities, and environments of early childhood principles and practices.

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 of developmentally-appropriate activities utilizing a variety of methods and materials.

PREREQUISITES/CO-REQUISITES:

(ACCUPLACER Reading Comp 056 and ACCUPLACER Sentence Skills 058 and Background Check Form 1 and Credit level [ECD 203](#) Minimum Grade of C or Credit level [ECD 203](#) Minimum Grade of TC and Credit level [ECD 105](#) Minimum Grade of C or Credit level [ECD 105](#) Minimum Grade of TC and Credit level [ECD 131](#) Minimum Grade of C or Credit level [ECD 131](#) Minimum Grade of TC) or (COMPANION Reading 056 and COMPANION Sentence Skills 058 and Background Check Form 1 and Credit level [ECD 203](#) Minimum Grade of C or Credit level [ECD 203](#) Minimum Grade of TC and Credit level [ECD 105](#) Minimum Grade of C or Credit level [ECD 105](#) Minimum Grade of TC and Credit level [ECD 131](#) Minimum Grade of C or Credit level [ECD 131](#) Minimum Grade of TC) or (COMPASS Reading 65 and COMPASS Writing 31 and Background Check Form 1 and Credit level [ECD 203](#) Minimum Grade of C or Credit level [ECD 203](#) Minimum Grade of TC and Credit level [ECD 105](#) Minimum Grade of C or Credit level [ECD 105](#) Minimum Grade of TC and Credit level [ECD 131](#) Minimum Grade of C or Credit level [ECD 131](#) Minimum Grade of TC) and (SAT Critical Reading 380 and Background Check Form 1 and Credit level [ECD 203](#) Minimum Grade of C or Credit level [ECD 203](#) Minimum Grade of TC and Credit level [ECD 105](#) Minimum Grade of C or Credit level [ECD 105](#) Minimum Grade of TC and Credit level [ECD 131](#) Minimum Grade of C or Credit level [ECD 131](#) Minimum Grade of TC) or (ACT Reading 14 and ACT English 12 and Background Check Form 1 and Credit level [ECD 203](#) Minimum Grade of C or Credit level [ECD 203](#) Minimum Grade of TC and Credit level [ECD 105](#) Minimum Grade of C or Credit level [ECD 105](#) Minimum Grade of TC and Credit level [ECD 131](#) Minimum Grade of C and Credit level [ECD 131](#) Minimum Grade of TC) or (Multiple Measures English 1 and Background Check Form 1 and Credit level [ECD 203](#) Minimum Grade of C or Credit level [ECD 203](#) Minimum Grade of TC and Credit level [ECD 105](#) Minimum Grade of C or Credit level [ECD 105](#) Minimum Grade of TC and Credit level [ECD 131](#) Minimum Grade of C or Credit level [ECD 131](#) Minimum Grade of TC) or (Credit level [ENG 100](#) Minimum Grade of C* or Credit level [ENG 155](#) Minimum Grade of C or Credit level [ENG 155](#) Minimum Grade of TC or Credit level [ENG 101](#) Minimum Grade of C or Credit level [ENG 101](#) Minimum Grade of TC and Background Check Form 1 and Credit level [ECD 203](#) Minimum Grade of C or Credit level [ECD 203](#) Minimum Grade of TC and Credit level [ECD 105](#) Minimum Grade of C or Credit level [ECD 105](#) Minimum Grade of TC and Credit level [ECD 131](#) Minimum Grade of C or Credit level [ECD 131](#) Minimum Grade of TC)

REQUIRED MATERIALS:

Please visit the Bookstore online site for most current textbook information. Use the direct link below to find textbooks.

[BOOKSTORE](#).

Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

Text: *Making and Tinkering with STEM*, Cate Heroman, NAEYC

Text: *Exploring Math and Science in Preschool*. NAEYC

Text: *South Carolina Early Learning Standards for 3, 4, & 5 Year-Old Children*. South Carolina Department of Education

- 3 ring binder with dividers labeled: (1) notes (2) handouts (3) math activities (4) math in learning areas (5) science activities (6) science learning area (7) field work (8) other
- Tool kit (scissors, markers, ruler, gluestick, etc.)
- Zip close baggies for activities (snack, sandwich, quart, gallon size)
- Dice – You will need several (Dollar Store has small - 6 for \$1 and large - 2 for \$1)
- Poster board or other heavy board for game boards
- Game pieces
- Stickers or pictures for game boards
- Collection (shells, keys, bottle caps, etc.) for sorting and classifying
- Foam board or trifold for documentation board
- Camera
- Microsoft Office – Word
- INK
- Flash drive
- Printer or access to printer
- Cardstock

Additional Requirements:

This is a lab class with **75 required hours** including preparation of materials and field experiences. All students are expected to provide transportation and any expenses associated with transportation to and from all field experiences.

TECHNICAL REQUIREMENTS:

Access to Desire2Learn (D2L), HGTC's student portal for course materials.

WaveNet and D2L email access. Ability to download files and templates from course page on D2L; ability to use Microsoft Word; ability to download files and pictures from the Internet.

The majority of course requirements including submitting assignments, receiving notifications and feedback will occur through the course in D2L. The student will be required to access, download, and/or print material from "My Courses" through his(her) WaveNet account.

Please be advised that technology issues or problems are **not** an acceptable excuse for **not** participating as **required** for attendance or failing to submit an assignment on the due date. When having technology problems find another computer to complete the required work. Computers are open to students at numerous locations on all three campuses including open computer labs and the libraries. There are computers available for use in other public locations including the public libraries. A final option would be to contact a friend or relative to borrow a computer. When technology issues

are related to the system (i.e., D2L and WaveNet), and not the result of a broken computer, you should contact student online support OIT Help Desk at (843) 349-5340 or through their link on the WaveNet homepage. Although, technology issues or problems are **not** an acceptable excuse for **not** participating as required, it is a good idea to notify your professor about the problem or difficulty.

CLASSROOM ETIQUETTE:

As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

Netiquette: is the term commonly used to refer to conventions adopted by Internet users on the web, mailing lists, public forums, and in live chat focused on online communications etiquette. For more information regarding Netiquette expectations for distance learning courses, please visit: [Online Netiquette](#).

STUDENT RESPONSIBILITY AND COURSE ACADEMIC MISCONDUCT:

Students must complete their own work whether online or in a traditional classroom. Under Section III - Proscribed Conduct - of the Student Code for the South Carolina Technical College System (3-2-106.1) as published in the Horry-Georgetown Technical College (HGTC) Catalog and Student Handbook, "Academic Misconduct *[is]* all forms of academic misconduct including, but not limited to, cheating on tests, plagiarism, collusion and falsification of information *[and]* will call for discipline. Alleged violations will be handled according to the procedures presented in Section IV" of the catalog. The disciplinary procedures and possible consequences for an act of academic misconduct are detailed under Sections IV and V of the HGTC Catalog and Student Handbook.

Therefore, students **must** complete their **own** work whether online or in a traditional classroom. Any student who does **not** complete his(her) own work, completes his(her) work through significant assistance of another person(s) or completes work for another student, whether for compensation or not, has violated the Student Code and has committed academic misconduct. The act of misconduct includes plagiarism, or the act of using or presenting another person's work as your own.

To avoid the question of plagiarism, all information and material used as reference for any paper or project must have a parenthetical citation in the text identify the source of that knowledge and also listed on the reference page as required by the Publication Manual of the American Psychological Association.

Any incident of suspected academic misconduct will be investigated, and should the evidence find that student is in violation of the student code, the incident will be formally reported to the Chief Instructional Officer or her designate.

The possible disciplinary actions, which a professor may take for a substantiated incident of misconduct, are set forth in the Horry-Georgetown Technical College Catalog and Student Handbook. The student with questions and/or concerns should consult the Student Code for the South Carolina Technical College System (3-2-106.1) published in the HGTC College Catalog and Student Handbook and/or course professor of record.

Part II: Student Learning Outcomes

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

Upon completion of this course, the student will be able to:

1. Identify, use, and implement science and math content, concepts, and skills appropriate for young children. (NAEYC Standard 5: Using Content Knowledge to Build Meaningful

- Curriculum, Key Element A, Supportive Skill 2)
2. Plan, implement, and evaluate age-appropriate science and math teaching and learning techniques. (NAEYC Standard 4: Using Developmentally Effective Approaches, Key Elements B and C; NAEYC Standard 5: Using Content Knowledge to Build Meaningful Curriculum, Key Elements B and C; Standard 6: Becoming a Professional, Key Element B; Supportive Skills 3-5)
 3. Integrate science and math activities into various areas of the curriculum. (NAEYC Standard 4: Using Developmentally Effective Approaches, Key Elements B and C; NAEYC Standard 5: Using Content Knowledge to Build Meaningful Curriculum, Key Element B, Supportive Skills 3-5)
 4. Document, analyze, and reflect on observations and interactions with young children to promote positive outcomes. (NAEYC Standard 3: Observing, Documenting, and Assessing to Support Young Children and Families, Key Element B, C; NAEYC Standard 4: Using Developmentally Effective Approaches, Key Elements A-D, Supportive Skills 1, 3, 4)
 5. Design content specific information appropriate to share with diverse families. (NAEYC Standard 2: Building Family and Community Relationships, Key Element B, C; Supportive Skill 3)

REQUIRED COURSE MEASURES/ARTIFACTS and EVALUATION:

MODULE ONE: Professional Reading

ASSESSMENT: Notes from course texts that relate to math and science instruction.

STUDENT LEARNING OUTCOME

- Identify, use, and implement science and math content, concepts, and skills appropriate for young children.

MODULE TWO: Learning Plans and Analysis, Learning Areas

ASSESSMENT: Activity plans for math and science, field experiences, analysis of teaching performance, and family communications.

STUDENT LEARNING OUTCOMES

- Plan, implement, and evaluate age-appropriate science and math teaching and learning techniques.
- Document, analyze, and reflect on observations and interactions with young children to promote positive outcomes.
- Design content specific information appropriate to share with diverse families.

MODULE THREE: Instructional Materials

ASSESSMENT: Math materials, science learning area materials

STUDENT LEARNING OUTCOMES

- Plan, implement, and evaluate age-appropriate math teaching and learning techniques.
- Integrate math activities into various areas of the curriculum.

****Students – please refer to the Instructor’s Course Information sheet for specific information on assessments and due dates.***

Part III: Grading and Assessment

EVALUATION OF REQUIRED COURSE MEASURES/ARTIFACTS*

Students’ performance will be assessed and the weight associated with the various

measures/artifacts are listed below.

EVALUATION OF REQUIRED COURSE ASSIGNMENTS

Professional Reading, Reflection, and Analysis	100 points
Mathematics and Science in a Learning Area	150 points
Field Experiences	225 points
Instructional Materials	200 points
Documentation Board	75 points
Professionalism	100 points
In Class Participation	50 points
Exam	<u>100 points</u>
	1000 points

****Students, for the specific number and type of evaluations, please refer to the Instructor's Course Information Sheet.***

GRADING SYSTEM:

A = 100 – 90, B = 89- 80, C = 79 – 70, D = 69 – 60, F = 59 and below.

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the academic calendar for deadlines for add/drop ([ACADEMIC CALENDAR](#)). You must attend at least one meeting of all of your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly.

Part IV: Attendance

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of eighty percent (80%) of his or her classes in order to be eligible to receive credit for any course. However, due to the varied nature of courses taught at the College, a more rigid attendance policy may be required by individual instructors. At a minimum, a student may be withdrawn from a course(s) after he or she has been absent in excess of ten percent (10%) of the total contact hours for a course. **Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.**

For online and hybrid courses, check your Instructor's Course Information Sheet for any required on-site meeting times. Please note, instructors may require tests to be taken at approved testing sites, if you use a testing center other than those provided by HGTC, the center may charge a fee for its services.

Part V: Student Resources



The Student Success and Tutoring Center (SSTC)

The SSTC offers to all students the following **free** resources:

1. **Academic coaches** for most subject areas, **Writing Center Support**, and **college success skills**.
2. **On-line student success and academic support resources**.

Visit the SSTC website: [Student Success & Tutoring Center](#) and visit the student services tab in your WaveNet account to schedule appointments using TutorTrac. For more information, call: SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455. Room locations and Live Chat is available on the SSTC website.



Student Information Center: WaveNet Central (WNC)

WNC offers to all students the following **free** resources:

1. **Getting around HGTC:** General information and guidance for enrollment!
2. Use the [Online Resource Center \(ORC\)](#) for COMPASS support, technology education, and online tools.
3. **Drop-in technology support or scheduled training** in the Center or in class.
4. **In-person workshops, online tutorials and more services** are available.

Visit the WNC website: [Wavenet Central](#). Live Chat and Center locations are posted on the website. Or please call one of the following locations: WNC Conway, 349-5182; WNC Grand Strand, 477-2076; and WNC Georgetown, 520-1473.

Student Testing: (If course is offered in multiple format include this section, delete if only F2F sections are offered.)

Testing in an **online/hybrid** course may be accomplished in a variety of ways:

- Test administered within D2L
- Test administered in writing on paper
- Test administered through Publisher Platforms

Further more tests may have time limits and/or require a proctor.

Proctoring can be accomplished either face-to-face at an approved site or online through RPNOW, our online proctoring service. To find out more about proctoring services, please visit the [Online Testing](#) section of the HGTC's Testing Center webpage.

The **Instructor Information Sheet** will have more details on test requirements for your course.

Disability Services

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to Beth Havens, Director of Student Development on the Conway Campus Jaime Davis, Counselor/Advisor on the Georgetown Campus or Kristin Griffin, Counselor on the Grand Strand Campus. These individuals will review documentation of the student's disability and, in a confidential setting with the student, develop an educational accommodation plan.

Note: It is the student's responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodations may be determined, accepted, and provided.

Statement of Equal Opportunity/Non-Discrimination Statement

Horry Georgetown Technical College prohibits discrimination and harassment, including sexual harassment and abuse, on the basis of race, color, gender, national or ethnic origin, age, religion, disability, marital status, veteran status, sexual orientation, gender identity, or pregnancy in educational programs and/or activities.

Title IX Requirements

Horry Georgetown Technical College prohibits the offenses of domestic violence, dating violence, sexual assault, and stalking. Any student who believe he or she has experienced or witnessed discrimination including sexual harassment, domestic violence, dating violence, sexual assault or stalking is encouraged to report such incidents to one of the College's Title IX Coordinators.

*Faculty and Staff are required to report incidents to the Title IX Coordinators when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

Inquiries regarding the non-discrimination policies:	
Student and prospective student inquiries concerning Section 504, Title II, and Title IX and their application to the College or any student decision may be directed to the Associate Vice President for Student Affairs.	Employee and applicant inquiries concerning Section 504, Title II, and Title IX and their application to the College may be directed to the Associate Vice President for Human Resources.
Dr. Melissa Batten, AVP Student Affairs <i>Title IX Coordinator</i> Building 1100, Room 107A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5228 Melissa.Batten@hgtc.edu	Jacquelyne Snyder, AVP Human Resources <i>Section 504, Title II, and Title IX Coordinator</i> Building 200, Room 212A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5212 Jacquelyne.Snyder@hgtc.edu