

**The NASA Climate Education Experience:
Using Diverse Instructional Strategies**

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I. Course Description

ED 452-Advanced Seminar Methods (6 hour course)

Dr. Loretta Walton Jagers-Course Professor

This undergraduate course is designed to focus on selecting and using appropriate content, activities, and instructional strategies for meeting the diverse learner needs of early childhood and elementary students. Candidates will be required to use the Common Core State Standards to design grade specific instructional lessons that relate to a given Climate Education module. The Climate Education workshop tools and materials will serve to guide the students in the development of this culminating project. The candidates will be required to implement specific activities from their Climate Education project at the on-site partnership school.

- **Projected Activity/Experience and Relationship to Climate Education Concept**
 - **Critique articles on Climate Education (Oceans)**
 - **Review and discuss various resources and activities on selected Climate Education concepts from the Climate Education workshop packet**
 - **Design a grade specific daily Science lesson plan on one of the following:**
 - **What is the influence of El Nino or La Nina on oceans and climate patterns?**
 - **What are the seasonal environmental characteristics of the Southern Oceans?**
 - **Review resources/activities from the NASA NICE Workshop Packet to infuse into the lesson**
 - **Fieldtrip to *Sci Port: Louisiana's Science Center* (Shreveport) to gather additional resources and materials for the instructional lesson**
 - **Implement the lesson at the on-site partnership school (various student artifacts will be provided as part of the documentation materials)**

II. Course Description

ED 506-Correction of Reading difficulties: Practicum (3 hour course) Dr. Loretta Walton Jaggers-Course Professor

This graduate course focuses on the application of diagnostic data to guide the prescription of instructional strategies and materials for remediating given reading difficulties. This course involves numerous clinical/field-based activities that include actual teaching experiences with children. The advanced candidates are also required to use the Common Core State Standards to construct specific resources and activities for correcting reading difficulties. The results of the formal and informal diagnostic measures must be used to design the appropriate grade level materials and activities for remediation. This diagnostic-remediation process must be implemented with students at the on-site partnership school.

- **Projected Activity/Experience and Relationship to the Climate Education Concept**
 - Critique and discuss articles on Climate Education (Oceans)
 - Describe how *weather* and *climate* influence our daily lives
 - Discuss the importance of effectively using the *Diagnostic-Remediation Connection* to remediate Reading difficulties
 - Develop a collection of remediation strategies that may be used to remediate selected Reading difficulties
 - Candidates must construct a Children's Book that may be used to remediate specific Reading/Literacy skills (vocabulary skills, comprehension skills, Phonics skills, etc.) The book should focus on "Causes of Hurricanes" and connect to Hurricane Issac
 - Candidates will use various resources (to construct their Children's Book), that include Can you...Follow the Carbon Atom? , that was presented at the Climate Education workshop
 - Candidates will present their books at the partnership school and bring the student artifacts to share in the university classroom setting

III. Course Description

ED 304-Children's Literature (3 hour course)

Dr. Elaine Foster-Course Professor

This course provides opportunities for initial early childhood and elementary education candidates to select, present, interpret, and evaluate literature to meet diverse learner needs. This course includes lectures, research, demonstrations, collaborative discussions, literature -based instruction, and presentations at the on-site partnership schools and other diverse learning settings. Candidates are required to use the Common Core State Standards as a basis for developing instructional strategies, resources, materials, and projects. One of the *Signature Projects* focuses on given Climate Education concept .

- **Projected Activity/Experience and Relationship to Climate Education Concept**

In an effort to expose teacher candidates to various ways in which literacy strategies can be used to teach content across the curriculum, specific components of the NASA Climate Education Program will be infused into the interactive activities for the course, ED304: Children's Literature. The teacher candidates enrolled in this course will identify the titles and authors of children's books that are appropriate for grades 1-5. A book list will be compiled and utilized as a primary resource for developing literacy – based activities for teaching students how to locate and gather evidence from informational text in order to respond to complex comprehension questions. The teacher candidates will demonstrate proficiency in presenting the Climate Education activity to their peers and to elementary students at the GSU laboratory and partnership schools. This activity is also consistent with the Common Core State Standards for English Language Arts that focus on the incorporation of more complex text instead of just literary text into reading instruction.

