1. Universal Design for Learning: Reaching All Learners in the Digital Age
(3 Graduate credits in education)

2. Instructor available for consultation.

3. Course Description

Teachers are challenged on a daily basis to educate diverse groups of students who come from a variety of cultures with varying languages, learning styles, abilities and disabilities. In 21st century schools, these students are rightfully included in the general education classroom. Educational demands are on the rise and higher curriculum standards are shifting from acquiring knowledge to integrating knowledge. All students are held to the same high standards, and teachers are increasingly accountable for students' educational achievement.

In addition to the challenges presented in our classrooms, recent research in neuroscience from the Center for Applied Special Technologies (CAST) confirms that each brain processes information differently and the way we learn is as individual as DNA or fingerprints. Learning is not one thing; it differs across and within tasks and individuals. Although learning is not one thing, teaching often is. In a classroom of diverse learners there is no single method of instruction that can meet the needs of all students.

CAST defines Universal Design for Learning (UDL) as an educational approach to teaching, learning, and assessment, by drawing on new brain research and new media technologies to respond to individual learner differences. The framework is based on the Universal Design movement in architecture and product development. Universal Design is not a one size fits all solution; rather it emphasizes alternatives embedded into the original design. Accommodations and modifications are designed from the beginning, not added on later, which increases access opportunities for everyone. UDL provides a blueprint for creating flexible goals, methods, materials and assessments that enable students with diverse needs and learning styles to succeed in an inclusive, standards-based, digital classroom. This course will provide practical, hands-on, digital age solutions to reach and teach all learners in the 21st century.

A decade into the 21st century, educators are faced with both challenges and opportunities. This course is designed to assist you in confronting those challenges and exploring the unimaginable opportunities of education for all learners in the digital age.

4. Learning Outcomes
Those participating in the activities, instruction, and discussion in this course will:

1. Understand the three principles of Universal Design for Learning (UDL).

2. Describe the relationship between the UDL principles and the three primary neural networks essential for learning.
3. Explain the impact that UDL has on curriculum.
4. Identify barriers and strengths within curricular goals, materials, methods, and assessments.
5. Apply knowledge of the UDL framework to the lesson planning process.
6. Apply skills to create lessons that maximize learning for all students using technology.
7. Locate resources regarding UDL information, materials and technology.
8. Learn and create practical classroom and school-based applications of UDL.
9. Customize teaching and learning using a variety of new technologies.*
10. Evaluate the latest brain research and its impact on diverse learners.
11. Consider new federal and state policies that support UDL.
12. Explore new frontiers in the delivery of curricular content.
13. Understand the impact of the "Net Generation" on education.
14. Explain the benefits of a shift from a traditional, broadcast model of education to one that is customized, collaborative and interactive.
15. Describe strategies parents, teachers and elder influencers can use to engage in open and informative discussions to ensure technology is properly used by students.

*Throughout the course, participants will be learning about, evaluating, and utilizing a wide variety of computer and web-based technologies including: blogs, wikis, social bookmarking, search engines, web quests, text-to-voice and voice-to-text, word clouds, social networking, podcasting, audio and video recording, online communication tools, collaborative environments, accessibility features in standard Microsoft and Apple operating systems, and much, much more.

These outcomes will be accomplished by involving participants in assigned readings; direct and differentiated instruction; and a variety of interactive methodologies including paired reflection, class activities, small group work, facilitated discussions, and various computer and web-based technologies.

5. Course Requirements

Participants must read the book(s) required for the course and complete the class activities and homework assigned by the instructor. Additionally, they must select one of the project options listed on the opposite side of this sheet. Projects may not be handed in while a course is in session and must be postmarked within two weeks of the last day of class.

Grading standards for your *participation* grade are determined by the criteria listed below.

Course participation (50%):

1. Participation: Actively engages in all activities and is respectful, cooperative and supportive to the instructor and other class members.

2. Class assignments: Meets criteria for each assignment and class experience is used to demonstrate understanding of course concepts.
3. Attendance: Class attendance is required. The enforcement of such attendance policy lies with the instructor. Where possible, students should inform their instructors if they plan to be late or absent from class. It is a general practice that faculty members take attendance at every class. Students who must be absent from class should make every attempt to contact their instructor in advance. It is the student's responsibility to make up missed material or time.

6. Incomplete Policy

Students will have one semester to complete their "Incompletes". Students who do not complete their "Incompletes" by the end of the following semester will receive an F.

Each instructor must provide clear guidelines on the course syllabus as to what constitutes an Incomplete in the course.

7. Withdrawal Policy

Withdrawal from a course: A $25.00 fee will be assessed if the student's withdrawal request is at least four business days in advance of the start of the class. No portion of the $75.00 deposit will be refunded at any time after that. Please call the RTC office if you need to withdraw after a class starts.

Withdrawal from the College: Students wishing to withdraw from the College must notify their academic advisor.

8. Plagiarism

It is a serious violation of the norms of the academic community to appropriate the ideas of other people without credit or permission, and it is important to learn to discriminate between exploitation and the legitimate use of the ideas of others. The most general rule is that any use of another person's ideas – whether the source is published or not - should be acknowledged fully and in detail. Since disciplines show some differences on how this should be done, instructors should be consulted as to the form and nature of the acknowledgments required by each field.

If you wish to seek assistance from another student in the preparation of any written work or exams, consult your instructor first to determine if such assistance is permissible. If permitted, such assistance should be acknowledged in the written work.

For information on *Medical Withdrawals*, please contact RTC.

9. Educational Themes

This course promotes:

- Subject matter expertise through the study of Universal Design for Learning.
- Excellence in planning and practice through practical application of the UDL framework at all levels.
- Commitment to all learners through the study the latest brain research on diverse learners.
- Positive effect on student growth through the exploration of new technologies and the barriers within curricula.
- Professionalism, advocacy and leadership through study of government education policies and collaborative professional implementation strategies.

1.0 Implementation of the American with Disabilities Act

The college will make reasonable accommodations for persons with documented disabilities. If you have a disability which may have some impact on your work in this course, please contact your professor.

11. Required Text

Rose, D. and Meyer, A. (2002). *Teaching every student in the digital age: Universal design for learning.* Alexandria, VA: ASCD.

12. Course Outline

I. Teaching Every Student in the Digital Age

A. The Digital Age: Challenge and Opportunity

i) Rise in Educational Demands

ii)New Neuroscience Research

iii) Diverse Student Populations

iv) Rapidly Changing Technology

v) The Role of Technology and Disability in Educational Reform

II. What is Universal Design for Learning?

A. What Brain Research Tells Us About Learner Differences

i) Learner Diversity

ii) Primary Neural Networks Essential for Learning

B. Universal Design for Learning Principles

i) Multiple Means of Representation

(1) Perception

(2) Language and Symbols

(3) Comprehension

ii) Multiple Means of Expression and Action

(1) Physical Action

(2) Expressive Skills and Fluency

(3) Executive Function

iii)Multiple Means of Engagement

(1) Recruiting Interest

(2) Sustaining Effort and Persistence

(3) Self-Regulation

C. Flexible Instructional Media

III. Applying the Universal Design for Learning Framework

A. Using the Universal Design for Learning Framework and Guidelines.

B. UDL Classroom Practices

i) Explicit Instruction

ii) Differentiated Instruction

iii)Curriculum-Based Evaluations

iv)Classroom Management

v) Peer Mediated Instruction and Intervention

C. UDL Curriculum Enhancements

i) Background Knowledge

ii) Graphic Organizers

iii)Text Transformations

iv)Curriculum Modification

v) Virtual Reality/Simulations

vi)Background Knowledge with UDL

vii) Graphic Organizers with UDL

viii) Virtual Reality/Simulations with UDL

IV. Universal Design for Learning in 21st Century Schools

A. The Universally Designed Curriculum

i) Using UDL to Set Clear Goals

ii) Using UDL to Support Every Student's Learning

iii)Using UDL to Accurately Assess Student Progress

iv) Flexible Instructional Media and Accessible Instructional Materials

B. Federal Legislation Supporting UDL

i) Individuals with Disabilities Education Act (IDEA)

ii) Americans with Disabilities Act (ADA)

iii) Response to Intervention (RtI)

iv) Positive Behavioral Interventions and Supports (PBIS)

v) No Child Left Behind (NCLB)

vi) National Instructional Materials Accessibility Standard (NIMAS)

C. Making UDL a Reality

i) Systemic Change

ii) Creating Systemic Change

iii) Collaborative Strategies for UDL Success

V. Understanding the Net Generation

A. The Net Generation Comes of Age

B. Characteristics of the Net Generation

C. The Net Generation Brain

D. The Net Generation as Learners: Rethinking Education

13. Summative Assessment

Learning Extension Projects (50%): Participant will choose one (1) project option from the nine listed below. LEP's must be submitted within the grading timeline.

Learning Extension Project – APA format for all writing (Each project has a reference page to list sources for project and/or citations and all references listed must be included in the body of the project)

1. A research/reflective paper (five to six pages) reviewing at least six different pieces of literature in the field that deal with a major focus of the course. Reflect upon major concepts of course content and their application in your classroom. Include citations from sources such as, journal articles, books, and internet sources. a) Analyze the research, and then b) formulate your own opinion about implications for educational changes in your classroom and/or school. List references.

2. A Reference Review/Annotated bibliography reviewing the literature in the field, using at least six sources (including journal articles, books, and/or internet sources).

Part 1 - Summary. Each article will have a 1 - 2 page summary and will discuss 2 - 3 major points that demonstrate your understanding of each. (Reference source is at top of each page)

Part 2 – Themes/Application. Describe 2 - 3 overriding course based themes, concepts or principles found .in the literature, and their application in the classroom. Then, reflect upon the sources you have explored and how they, *as a whole*, apply to your teaching. Describe the changes you have made in your teaching as a result of your study.

3. Four content-related lesson plans that integrate course concepts. Each detailed lesson plan (ANY lesson plan FORMAT is acceptable but must include: objective(s), tasks, and assessments aligned with new strategies, skills, or approaches learned in the course). Each lesson plan is followed by a 1– 2 page research based rationale with 1- 3 APA citations. The reference page should contain 3 - 6 sources (including the course text).

4. Create a product - Examples include: children's book, collection of original songs, manipulatives, handbooks, or centers. The product must align with new strategies, skills, or approaches learned in the course, supported by a 4 - 5 page rationale with 3- 5 citations/references required. (Permission must be granted by RTC for the use of any RTC materials in any product created for formal publication)

5. Create a portfolio of 6 - 8 pieces of evidential material that supports the use of course content in your classroom. Examples include: exemplar student work, projects, assessments or other related material. By definition, a portfolio must include a reflection for each piece; therefore, each piece will be accompanied by a 1 - 2 page reflection. Each reflection needs citations and the project should have 3- 5 references.

6. A case study of one student in your room. Include documented teacher-observation, personal journal responses and reflections. The 5 – 6 page study should include citations and information from 4 - 5 sources and analyze what is working/not working based on a synthesis of observations and research.

7. Presentation plan - Design a presentation to share a major course concept(s) with your peers. Examples include a staff development plan, in-service workshop, or faculty meeting presentation. The project must include an outline, a PowerPoint component, handouts, and the teacher guide portion of the presentation incorporating the rationale and citations for the content included. The actual presentation may be video-taped and sent to instructor.

8. Instructional design - change your instructional approach/strategy to reflect the integration of selected skills and structures you have learned in this course to meet the guidelines of your curriculum. Compare and contrast your previous teaching methodologies to your new instructional approach/strategy, then describe these changes in a 5 - 6 page rationale with 4 - 6 APA style citations threaded throughout.

9. Other - to be decided with the instructor, includes 3- 5 citations/references and rationale.

LEP's are listed in random order – not in order of complexity. Each project is weighed equally – each is assessed on its own merit and a grade given accordingly. Replication of course materials is not considered a new or unique project.

Students matriculated in the MAED degree program will maintain a portfolio containing all projects. This portfolio may be beneficial when developing a teacher action research design topic.

The instructor is available for consultation and questions in person, by phone or through email.

Remember – each project needs a final reference page, APA style. Please see our website for APA guidelines.

Learning Extension Project Assessment

Course Title: _____

Course Number: _____

Student Name: _____

Project Option Chosen: _____

Place X in appropriate box	Unacceptable 0	Foundational 2	Developing 3	Proficient 4	Mastery 5
1. Chooses appropriate strategies to meet the stated objectives of the LEP, including instructor conferences					
2. Incorporates course content					
3. Shows awareness of diverse learner needs					
4. Discusses application of knowledge to the classroom					
5. Uses conventions of good academic writing such as format and style guidelines					
TOTALS:					

FINAL RAW SCORE _____

Rubric Grading Scale ~ 25 points total

Grade	Raw Score
A	24-25
A-	23
B+	22
B	21
B-	20
C+	19
C	18
F	17 or below

LETTER GRADE _____

Instructor Signature _____ Date _____

14. Course Grading Scale

There is NO A+
A 96-100
A- 92-95
B+ 88-91
B 84-87
B- 80-83
C+ 73-79
C 72-75
F 71 and below

15. Bibliography

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