# Dewar College of Education and Human Services Valdosta State University Department of Curriculum, Leadership, and Technology

# EDAT 7100 Research Methodology in Education 3 Semester Hours [Online GOML]

# **Guiding Principles (DEPOSITS)**

(Adapted from the Georgia Systemic Teacher Education Program Accomplished Teacher Framework)

<u>Dispositions</u> Principle: Productive dispositions positively affect learners, professional growth, and the learning environment.

Equity Principle: All learners deserve high expectations and support.

<u>Process</u> Principle: Learning is a lifelong process of development and growth.

Ownership Principle: Professionals are committed to and assume responsibility for the future of their disciplines.

<u>Support</u> Principle: Successful engagement in the process of learning requires collaboration among multiple partners.

<u>Impact</u> Principle: Effective practice yields evidence of learning.

<u>Technology</u> Principle: Technology facilitates teaching, learning, community-building, and resource acquisition.

Standards Principle: Evidence-based standards systematically guide professional preparation and development.

#### **InTASC Model Core Teacher Standards**

- Standard #1: Learner Development. The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.
- Standard #2: Learning Differences. The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.
- Standard #3: Learning Environments. The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.
- Standard #4: Content Knowledge. The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make the discipline accessible and meaningful for learners to assure mastery of the content.
- Standard #5: Application of Content. The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.
- Standard #6: Assessment. The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.
- Standard #7: Planning for Instruction. The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

Standard #8: Instructional Strategies. The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.

Standard #9: Professional Learning and Ethical Practice. The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.

Standard #10: Leadership and Collaboration. The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.

#### COURSE DESCRIPTION

This course provides a survey of educational and educationally-related research methods incorporating an applied approach to research design. Emphasized is the ability to read, interpret, conduct, and report research to improve practice in educational settings. Course assignments will focus on content and content-specific pedagogy aligned with the candidate's certification area

# REQUIRED TEXTBOOKS / RESOURCE MATERIALS

American Psychological Association (2010). *Publication manual of the American Psychological Association* (6<sup>th</sup> ed.). Washington, D.C.: The Association. ISBN 978-1-4338-0561-5.

Patten, M. L. (2014). *Understanding research methods* (9<sup>th</sup> ed.). Glendale, CA: Pyrczak Publishing. ISBN 978-1-936523-17-7.

Additional readings, as assigned.

## **COURSE OBJECTIVES.**

# **General Learning Objectives:**

The student will:

- 1. Demonstrate advanced ability to design, implement, and evaluate curriculum that promotes student learning. (O-CPL2.1,O-CPL2.2, O-CPL 3,1, O-CPL3.2 O-DL2.1, O-DL2.2, O-DL3.1, O-DL3.2, O-AL2.1, O-AL2.2, OAL3.1, O-AL3.2, O-EDL2.1, O-EDL2.2, O-EDL 3.1, O-EDL3.2)
- 2. Demonstrate advanced ability to plan, implement, and evaluate instruction to facilitate student learning. ((O-CPL2.1,O-CPL2.2, O-CPL 3,1, O-CPL3.2 O-DL2.1, O-DL2.2, O-DL3.1, O-DL3.2, O-AL2.1, O-AL2.2, OAL3.1, O-AL3.2, O-EDL2.1, O-EDL2.2, O-EDL 3.1, O-EDL3.2)
- 3. Demonstrate advanced depth and breadth of knowledge and skills in the academic discipline and pedagogy. (O-CPL2.1,O-CPL2.2, O-CPL 3,1, O-CPL3.2 O-DL2.1, O-DL2.2, O-DL3.1, O-DL3.2, O-AL2.1, O-AL2.2, OAL3.1, O-AL3.2, O-EDL2.1, O-EDL2.2, O-EDL 3.1, O-EDL3.2)
- 4. Demonstrate advanced knowledge of the student as influenced by cognitive, physical, emotional, social, cultural, environmental, and economic factors. (O-CPL2.1,O-CPL2.2, O-CPL 3,1, O-CPL3.2 O-DL2.1, O-DL2.2, O-DL3.1, O-DL3.2, O-AL2.1, O-AL2.2, OAL3.1, O-AL3.2, O-EDL2.1, O-EDL2.2, O-EDL 3.1, O-EDL3.2)
- 5. Demonstrate ability to use research to promote student learning and to contribute to the teaching profession. (O-CPL2.1,O-CPL2.2, O-CPL 3,1, O-CPL3.2 O-DL2.1, O-DL2.2, O-DL3.1, O-DL3.2, O-AL2.1, O-AL2.2, OAL3.1, O-AL3.2, O-EDL2.1, O-EDL2.2, O-EDL 3.1, O-EDL3.2)

- 6. Demonstrate advanced knowledge of assessment and the ability to use multiple sources of assessment for maximizing student learning. (O-CPL2.1,O-CPL2.2, O-CPL 3,1, O-CPL3.2 O-DL2.1, O-DL2.2, O-DL3.1, O-DL3.2, O-AL2.1, O-AL2.2, OAL3.1, O-AL3.2, O-EDL2.1, O-EDL2.2, O-EDL 3.1, O-EDL3.2)
- 7. Demonstrate high standards for professional practice. (O-CPL2.1,O-CPL2.2, O-CPL 3,1, O-CPL3.2 O-DL2.1, O-DL2.2, O-DL3.1, O-DL3.2, O-AL2.1, O-AL2.2, OAL3.1, O-AL3.2, O-EDL2.1, O-EDL2.2, O-EDL 3.1, O-EDL3.2)

# **Specific Learning Objectives:**

Students that successfully complete all course requirements should be able to:

- 1. Identify the definition of educational research and its importance. (InTASC 4)
- 2. Identify and describe basic research terminology. (InTASC 4)
- 3. Identify and describe ethics in research. (InTASC 9)
- 4. Identify and describe the purpose of sampling, sampling terminology, and different sampling procedures. (InTASC 4)
- 5. Calculate, graph, and interpret basic descriptive statistics. (InTASC 4 &5)
- 6. Identify and interpret basic inferential statistics (Pearson r, independent means t test, ANOVA) and effect sizes. (InTASC 4 &5)
- 7. Identify and describe basic measurement terminology, importance of validity along with types of validity, importance of reliability along with types of reliability. (InTASC 4)
- 8. Demonstrate understanding of fundamental concepts and skills required to design and conduct qualitative research including the role of culture and subjectivity. (InTASC 4 & 5)
- 9. Conduct critical evaluations of published research and/or evaluation articles. (InTASC 5)

# COURSE ACTIVITIES/ASSIGNMENTS/REQUIREMENTS

## **Course Assignments Overview**

This course is divided into 15 modules, or classes. Students are to complete all activities and assignments as listed under each class. Most classes contain a checklist and overview, a list of readings, several content pages, one or more assignments, and a discussion question. There are four basic types of assignments in this course. After each type of assignment, you will see an abbreviation in capital letters. This designates the type of assignment. The three types of assignments are described below.

## **Description of Course Activities**

Class Assignments (CA) (39 points)

Students are to complete class assignments as designated. A compilation of completed assignments is due on the date stated in the course outline. CAs are to be completed individually. There are 8 CAs valued at 4 points each and one CA (CA5) valued at 7 points, for a total of 39 points.

## Discussion Question (DQ) Assignements (28 points)

Students are to respond to discussion questions for each class. Discussion questions will only be available for one week, before they are closed. To obtain the maximum 2 points, students must post a response as well as comment on at least one classmate's response. DQs are to be completed individually. There are 14 DQs, for a total of 28 points.

## Evidenced-Based Project (EBP) Assignments (33 points)

Working in groups (assigned or self-selected), students will complete an evidence-based project using test score data (CRCT, EOCT, Postsecondary Data, etc.). Student groups will submit a final report. The final report should contain no less than eight pages, including a cover sheet. There are five components to the EBP; Groups and Permission, Performing and Interpreting a *t*-test,

Calculating an Effect Size, Completed Project, and Group Member Evaluation for a total of 33 points.

## **Late Assignments Policy**

All assignments and discussion topics have due dates and close at 11:59 p.m. on the day they are due. **Late assignments will not be accepted without prior instructor approval.** Assignments submitted late are subject to a minimum 1 point deduction for each day past the due date.

#### **COURSE EVALUATION**

Quality is expected in all products and performances. Points are summed from each task or activity to generate the final score for each student. Final grades are assigned based on a 10 point grading scale; A - 100% - 90%, B - 89% - 80%, C - 79% - 70%, D- 69% - 60%, and F - 59% and below.

#### **PROFESSIONALISM**

Within the coursework and fieldwork, educators expected to respect intellectual property, complete assignments with consistent punctuality, regularly attend class (online and/or face-to-face), make an effort to complete assignments completely and correctly, pay careful attention to detail in following instructions, show willingness to revise based on instructor or peer feedback, strive for creativity in devising products and processes, demonstrate enthusiasm in face-to-face and online endeavors, be helpful to peers, show self-reliance to enable independent progress/ completion of work, display courtesy in written and oral communications, and exhibit cooperation in group work situations. Professional educators should practice fairness based upon a belief that all learners can achieve.

**General rule**: In all cases, consider what the actions of a responsible professional would be; then practice those actions.

## DEWAR COLLEGE OF EDUCATION & HUMAN SERVICES POLICY ON PLAGIARISM

http://www.valdosta.edu/colleges/education/deans-office/policy-statement-of-plagiarism.php

<u>Course Policy on Use of TurnItIn</u>: TurnItIn is an online resource to guard against plagiarism. Several of the assignments throughout the semester will undergo review by TurnItIn to ensure every student's work is authentic and original.

#### **ACCESSIBILITY STATEMENT**

Valdosta State University is an equal opportunity educational institution. It is not the intent of the institution to discriminate against any applicant for admission or any student or employee of the institution based on the age, sex, race, religion, color, national origin, disability, or sexual orientation of the individual. It is the intent of the institution to comply with the Civil Rights Act of 1964 and subsequent Executive Orders as well as Title IX, Equal Pay Act of 1963, Vietnam Era Veterans Readjustment Assistance Act of 1974, Age Discrimination in Employment Act of 1967, and the Rehabilitation Act of 1973.

**Title IX Statement:** Valdosta State University (VSU) is committed to creating a diverse and inclusive work and learning environment free from discrimination and harassment. VSU is dedicated to creating an environment where all campus community members feel valued, respected, and included. Valdosta State University prohibits discrimination on the basis of race, color, ethnicity, national origin, sex (including pregnancy status, sexual harassment and sexual violence), sexual orientation, gender identity, religion, age, national origin, disability, genetic information, or veteran status, in the University's

programs and activities as required by applicable laws and regulations such as Title IX. The individual designated with responsibility for coordination of compliance efforts and receipt of inquiries concerning nondiscrimination policies is the University's Title IX Coordinator: Director of the Office of Social Equity, <a href="mailto:titleix@valosta.edu">titleix@valosta.edu</a>, 1208 N. Patterson St., Valdosta State University, Valdosta, Georgia 31608, 229-333-5463.

**Access Statement:** Students with disabilities who are experiencing barriers in this course may contact the Access Office for assistance in determining and implementing reasonable accommodations. The Access Office is located in Farbar Hall. The phone numbers are 229-245-2498 (V), 229-375-5871 (VP) and 229-219-1348 (TTY). For more information, please visit VSU's Access Office or email: <a href="mailto:access@valdosta.edu">access@valdosta.edu</a>.

#### STUDENT OPINION OF INSTRUCTION

At the end of the term, all students will be expected to complete an online Student Opinion of Instruction survey (SOI) that will be available on BANNER. Students will receive an email notification through their VSU email address when the SOI is available (generally at least one week before the end of the term). SOI responses are anonymous, and instructors will be able to view only a summary of all responses two weeks after they have submitted final grades. While instructors will not be able to view individual responses or to access any of the responses until after final grade submission, they will be able to see which students have or have not completed their SOIs, and student compliance may be considered in the determination of the final course grade. These compliance and non-compliance reports will not be available once instructors are able to access the results. Complete information about the SOIs, including how to access the survey and a timetable for this term is available at <a href="http://www.valdosta.edu/academic/OnlineSOIPilotProject.shtml">http://www.valdosta.edu/academic/OnlineSOIPilotProject.shtml</a>.