

## Prospective Non-Matric Student Information Sheet

This sheet has been prepared for students interested in taking courses in the Learning and Instruction (LAI) Department who **have not been formally accepted** to a program.

Students interested in taking classes in LAI on a non-degree (non-matriculating) basis must complete an online application for non-degree students that can be found at <http://ed.buffalo.edu/academics/courses.html>. In addition to the online application and **\$35.00 non-refundable fee**, proof of a bachelor's degree is required. Students may take up to 12 credits as a non-degree student. Non-degree students are allowed to enroll in the courses below.

**\*\*PLEASE NOTE: Application fees are NON-REFUNDABLE. Course offerings are subject to change without notice. Please contact the department before registering for a course to be sure the course is available and will run and avoid losing application fees. LAI reserves the right to drop a non-matriculated student registered for a course if the spot is needed for a student in a LAI program. Students may choose to seek non-degree enrollment in a different course if availability exists.**

### Tentative – Fall 2026 Non-Matric Selected Course Options

(The selections below are some options for Fall 2026. However, please visit [the Registrar's page](#) for a fuller listing in the fall term. Any course offered online may be possible, as long as the instructor agrees to your joining the class).

## COURSES FOR NON-MATRICULATING STUDENTS Fall 2026

### LAI 504 Program Planning & Leadership in Early Childhood and Elementary Education

This introductory graduate-level course centers on the question "what is quality in early childhood / childhood education?" In this course, students will explore the philosophies and foundations of early childhood and childhood as well as the most effective curricular, pedagogical, and dispositional approaches and practices. For example, the course considers curricular design, instructional practice, classroom organization, and family engagement. In particular, this course elevates community and culturally responsive and sustaining praxis as crucial to student success. Students will have the opportunity to develop an educational philosophy grounded in research while honing the pedagogical tools to enact it.

### LAI 508 AI + Learning: Ethics, Design & Practice

This course prepares (future) educators of all kinds to thoughtfully engage with artificial intelligence (AI) in K-12 educational contexts through ethical inquiry, hands-on design, and different forms of pedagogical practice. Grounded in human-centered perspectives, students will explore how AI is reshaping the landscape of teaching and learning--from personalized tools and algorithmic systems to creative applications and student agency.

Participants will build foundational knowledge of AI technologies, critically analyze their implications for equity, labor, and surveillance, and experiment with real-world tools to evaluate their pedagogical promise and pitfalls. Through reflection, redesign, and teaching simulations, students will develop their own stance as educators operating in--and helping reshape--AI augmented schools. Whether you see AI as opportunity, threat, or both, this course will equip you to lead with vision, ethics, and confidence. To be clear, students are not expected to have fluency with the covered technologies but will be expected to become familiar with them and develop (over the course) literacy in using generative AI.

### **LAI 511 Diversity in Early Childhood/Childhood Education**

In Buffalo alone, over 70 different languages are spoken in homes. This course explores implications of linguistic, cultural and other forms of diversity for those concerned with the education and development of children from birth-age 8. Related problems/issues will be dealt with in such a way that those taking this class will be able to better support in children: (1) a knowledgeable, confident self-identity (2) a comfortable, empathetic interaction with diverse people (3) a critical attitude toward bias and (4) a propensity to stand up for her/himself and for others in the face of bias. It will also assist participants in developing better coalitions with families of diverse students.

### **LAI 513 Teaching of Literature**

In this course we will examine how current theories of literary reading grounded in reader response can be used to build reflective and critical theories of teaching of literature. This is a rethinking of how and why we teach literature primarily in the secondary school, but also in upper elementary school and colleges. The course is experiential and grounded in cultural, constructivist theories of response to literature. We will read and discuss literature and pedagogical articles about the teaching of literature, observe literature teachers, present literature lessons, critique literature textbooks, engage in book groups, and examine our own and others' responses to literature. Our ongoing focus through these activities will be on why and how to teach engaged and reflective reading with attention to diversifying the curriculum. This is a discussion-based course appropriate for all master's students with an interest in the teaching of literature, construed broadly to include film and other media, with the opportunity to pursue a final project, based on a topic or question of personal/professional interest.

### **LAI 514 Adolescent Writing Across Curriculum**

This course begins with an overview of theory and research in cognitive strategies and sociocognitive views of reading, writing, speaking and listening processes. It then describes an approach to the teaching of reading and writing called strategic literacy instruction. The focus throughout is on discovering ways to help struggling readers and writers: students usually referred to as "low performing," "general," or "developmental;" students perceived as learning-disabled, resistant, at-risk or lower-track; students in special education classes or in classes where special students are mainstreamed; or kids who are just plain unmotivated. Evaluation includes a midterm report and a final project concerned with designing strategy-based literacy instruction.

### **LAI 518 Writing Workshop for Teachers**

This is a writing course for teachers and prospective teachers who want to extend their own writing experiences with the social support of others in a writing workshop format. Our major focus will be a cultural inquiry into our own lives through memoir writing, which could include family history, childhood stories, becoming and growing-up-as-a-teacher stories, coming-to-consciousness stories, situating-self-in-history stories, etc. We will draft more pieces than we revise and become aware of how significant and everyday experiences and people shape our sense of self, both personally and professionally. Looking across our stories, we will reflect on issues of growth and change, and on how experiences shape cultural perspectives. We will publish a class booklet and look for opportunities to submit these pieces for broader publication. There will be opportunities for other kinds

of writing, as well, depending on student interests. A new option in the course will be composing digital video stories--visual texts created in response to sequenced assignments, for the same purposes as the written texts. Although the teaching of writing is not the main focus of the course, we will be generating ideas, drafting, revising and editing our own writing/visual compositions using strategies and processes which are very helpful for K-12 students, too. We will share writing ideas and problems in presentations and in conversations, collaborating to form working/writing groups. As we write, we will read published memoirs, titles to be selected by students, but the major text for the class will be the drafts and revisions produced by class members.

### **LAI 520 Introduction to Social Education**

This is the first course in our social studies Ed.M. program. Its major purpose is to open doors to the field, to uncover it. We will be examining trends, changes, and persisting issues in both content and pedagogy. In so doing, we will be raising questions, considering options and probing their underlying assumptions as well as likely implications. This overview of the field is organized in three parts: (1) recent and current status of social studies education; (2) controls: curriculum knowledge, teachers and teaching; and (3) persistent issues and future prospects.

### **LAI 521 Improving Elementary Social Studies**

The focus of LAI 521 is teaching and learning social studies in the elementary school. We explore a variety of topics and issues related to social studies content, instruction, and assessment. Much of our conversation and work highlights questions relevant to the social studies field at large--e.g., what is/are the goal(s) of social studies? what is a viable relationship between teaching, learning, and assessment? how do we construct classrooms that reflect democratic ideals? These questions are important and play a role in every teacher's practice. But given the nature of LAI 521, our focus always returns to the classroom and to the practical issues of teaching and learning social studies.

### **LAI 522 Digital technology for Social Studies**

While understanding history and social science disciplines, and how they are constructed, is important for social studies teachers, they are not sufficient. In LAI 522, we spend considerable time reading, thinking, and talking about the subject of history and other social sciences. But we also push ourselves to consider pedagogical implications. The pedagogical component of each unit, then, features one of the commonplaces of education--subject matter/curriculum, learners/learning, teachers/teaching, and milieu/classroom environment. In each instance, we look at current research on teaching social studies and case studies of wise practice. Our focus is on big questions of teaching and learning: What ideas shall we teach, from whose perspective(s), and why? What about social events do we want learners to read, think about, experience, and know? How shall we represent social studies concepts and events and what instructional approaches shall we use? What can we do to create a vigorous learning environment where analysis, conjecture, debate, and playfulness can occur?

### **LAI 533 Science Instruction**

In this course, students examine learning theories (e.g. constructivism, developmentalism, behaviorism, Hebb's cell assembly model) and relate them to instructional strategies for the science classroom and laboratory. The development of a repertory of effective strategies to be applied to lesson and program design in support of varied learning modalities is an intended outcome of this experience. Problem-solving, writing to learn, inquiry labs, directed questioning, concept maps, cooperative techniques, and internet investigations are among the elements to be explored. Assignments include classroom and laboratory lesson designs, short papers, a concept map, and a written examination

**LAI 534 Measurement and Evaluation of STEM Instruction**

This course is designed to improve STEM educators' skills in assessing students on outcomes in the cognitive, affective and psychomotor (laboratory skill) domains. Course participants will learn how to assess STEM teaching and learning for diagnostic, formative and summative purposes. During the course, students will examine existing tests from various sources (e.g., New York State tests, NAEP, TIMSS, PISA etc.). A major focus is on the assessment of cognitive levels above the knowledge (Revised Bloom's Taxonomy) level. Course participants will develop various tests and conduct item and test analyses in order to improve STEM assessment and instruction. They will design a test grid (blueprint or table of specifications) for designing their own tests. Finally, students will learn how to develop an appropriate grading system.

**LAI 537 Language Diversity and Literacy**

Most educators agree that basic grammar and usage should be taught in some shape or form, what specifically do students need to know? Why and for what purposes? How does the notion of linguistic correctness fit into the intelligent teaching of reading and writing? How does grammar teaching fit into standards and standards-based assessment, and how does it mesh with issues in multicultural education and urban schooling? Finally, what, realistically, can we expect to gain from the time we spend teaching language and usage? To answer these questions, this course offers a view of language diversity and literacy based in sociocultural and sociolinguistic theories of literacy learning. The course pays special attention to what sociocultural approaches tell us about the ongoing debate over the teaching of grammar and usage. It discusses the language and literacy-learning strategies students bring from home and how these strategies can be used for facilitating the learning of academic writing, grammar, and usage. The practical side of the discussions and readings focuses on two separate issues: what teachers should know about grammar, usage, style, and mechanics; and what, how, and why teachers should teach grammar, usage, style, and mechanics.

**LAI 539 The Science of Reading Instruction**

The Science of Reading Instruction addresses advanced theories in the science of reading and scientifically based reading instruction for beginning readers and students with reading difficulties. The course emphasizes relevant research and evidence-based practices for teaching phonemic awareness, phonics, oral language and vocabulary, reading fluency, reading comprehension, and motivation to read.

**LAI 542 Enrichment Topics in Elementary and Middle School Mathematics**

Topics of mathematics of value to elementary and middle grades teachers to enrich their programs of mathematics instruction and motivational value for their students; emerging topics in the fields of K-8 mathematics.

**LAI 549 Childhood Development and Learning**

This course introduces child development as a scientific, applied and interdisciplinary field. Participants will gain a fundamental knowledge of the history and theories of child development, examine research on children's physical, cognitive, and social/emotional development, and study diverse paths of child development in different contextual, cultural and social settings. Furthermore, participants will explore the implications of child development research for social, political and educational issues. Finally, in order to connect one's knowledge of child development to practice, each participant will be required to conduct a case study of a child's development in multiple settings. Through the case study, participants will practice observational and interview skills, learn how to interpret and reflect on the results, and provide suggestions to facilitate the child's development and learning.

### **LAI 550 Literacy Acquisition and Instruction, Pre-K to Primary**

Reviews typical developmental progressions in the acquisition of oral language and print literacy in early childhood, including the sociocultural, cognitive, and motivational influences on literacy acquisition. Also includes a focus on developmentally appropriate instruction and assessment techniques, with an emphasis on observation of children engaged in authentic literacy activities.

### **LAI 552 Middle Childhood/Adolescent Literacy Methods**

Instructional theory and practice focusing on literacy in Grades 5-12 emphasizing building literacy in the content areas. Topics dealing with techniques for creating interest and motivation for literacy, study strategies, strategies for building comprehension, constructing meaning, and assessing students' literacy performance are explored.

### **LAI 560 Language Arts Methods**

Curriculum, methods, programs and materials for listening, speaking, reading, and writing.

### **LAI 561 Digital Music Classroom**

In this course, students will explore teaching music through the use of digital tools. A project-based curriculum will be used to investigate developing musicianship, critical listening skills, and critical evaluation of music in a digital classroom environment for elementary, middle, and high school students. Additional topics will include digital immigrants/digital natives in the music classroom; ISTE standards; rudimentary language of music technology; hardware (music keyboards; selection, use); types of music software; web 2.0 tools; and development of a music technology lab. Course requirements include individual and group projects, weekly reflections on participation in the work of the course, and development of a final digital music product. Technology skills will evolve; focus on music first.

### **LAI 562 English Language Learners & Emergent Bilinguals in EC/C: Theory & Practice**

This course is designed for mainstream childhood and early childhood educators preparing to serve English language learners (ELL) - emergent bilinguals (EB). It will focus on the foundations of first and second language acquisition and content learning and the development of bilingualism, biliteracy and biculturalism among ELLs-EBs. The course will examine linguistic, academic, cognitive, and socio cultural domains that impact this development and the identity formation and academic achievement of emergent bilinguals (EB). Participants will gain and understanding of the unique needs of ELLs/EBs and become familiar with research-based content and language-integrated practices that address such needs.

### **LAI 563 Language, Literacy and Culture**

The role of society and culture in language and literacy learning; the impact of society and culture in the literacy classroom; the impact of society and culture on curriculum, methods, and definitions of achievement.

### **LAI 565 Diverse Children's Literature**

The study of children's literature has grown increasingly important in the past decade due in part to an explosion in this area of publication, as well as to the emphasis in many schools on literature-based instruction. Furthermore, beyond the pedagogical value of learning to read, children's literature is a significant cultural artifact, one that has "power to celebrate, perpetuate, interrogate, subvert, expose, and even openly defy cherished myths and deeply entrenched ideological assumptions" (Butler, Dillard, & Keyser, 1996). In this course we examine historical and contemporary literature for children in order to identify not only the traditional elements of literature and illustrations, but to identify as well the myths and ideological assumptions of authors and illustrators. Topics include: the definition and depiction of families, multicultural selections, gender roles, expository text, and visual literacy.

### **LAI 574 Teaching the Exceptional Learner in the Regular Ed Classroom**

The purpose of this course is to aid in understanding diversity by preparing teachers to offer direct and indirect services to students within the full range of disabilities and special health-care needs in inclusive environments. Students will be provided with techniques designed to enhance academic performance, classroom behavior, and social acceptance for students with disabilities and special needs. Students will learn skills enabling them to (1) differentiate and individualize instruction for students with disabilities and special needs, (2) become familiar with instructional and assistive technologies, (3) implement multiple research-validated instructional strategies, (4) formally and informally assess learning of diverse students, (5) manage classroom behavior of students with disabilities and special needs, and (6) collaborate with others and resolve conflicts to educate students with disabilities and special needs.

### **LAI 575 Seminar in Informal STEAM Education**

This course is designed for master's and doctoral level students to explore, analyze, and review current research around the realm of outside-of-school learning related to the domain topics of science, technology, engineering, arts, and mathematics, as well as their transdisciplinary combination, STEAM. Learning theories and methods pertaining to informal STEAM education settings, such as museums, nature preserves, zoos, popular science media, after school clubs, local organizations, etc., will be discussed. Students will engage in critique and design activities to better understand the landscape of informal STEAM education and its relationship to STEAM in the classroom.

### **LAI 581 Linguistics for L2 Education**

What are the building blocks of language? What factors affect the learning of second languages: What are stress and intonation and how does their use affect communication in various languages? Is written language superior to spoken language? What exactly is a standard language? How does use of metaphor vary cross-linguistically? Why doesn't everyone successfully learn a second language? These and many other questions are the topic of discussion in this course. The purpose of this course is to provide pre-service second language teachers with a foundational understanding of the complex multifaceted system that we call language. Through lectures, discussions and problem solving, students will develop an understanding of the various components that constitute language: \* the sound system (phonetics and phonology) \* vocabulary and its component parts (morphology and the lexicon) \* the grammatical system and its organization (syntax) \* meaning (pragmatics and semantics) In addition to studying the components of language, we will explore issues in first and second language learning and discuss some of the interesting ways in which languages, societies, and cultures interact. This course meets a requirement of all Ed.M. students in TESOL, foreign language education, and bilingual education. It is open to all other graduate students on a space available basis.

### **LAI 587 Methods ESL Content Areas(remote section)**

This course focuses on the analysis of topics on teaching English as a second language through the content areas. Topics include theories and frameworks which explain the relationship between content teaching, cognition and language learning. Emphasis is given to instructional strategies used to teach ESL through mathematics, science and social studies to LEP students. Students complete a unit with lesson plans that include objectives and hands-on-activities designed to teach and assess English acquisition and content learning. A field-based project about teaching ESL integrated with a content area and based on both, a NYS content area curriculum and the Regents Learning Standards, is also required.

### **LAI 592 Foundations of Bilingual Education: Theory, Policies, and Practices**

This course covers key concepts that are the foundation and heart of bilingual education in the U.S.A. The first part of the course focuses on a review of historical, philosophical, and legal bases of education in general, and of the education of minority language, bilingual and limited-English proficient students in specific. The second

part of the course reviews current research findings and theories that demonstrate the relationship between culture, cognition, and second language acquisition. The third part of the course emphasizes the importance of productive relationships among the school, home and community, and the understanding of the concept of diversity.

### **LAI 599 Technology and Curriculum Integration**

This class is designed to answer the following questions:

- \* How can technology be used in the classroom environment? How does the incorporation of technology impact classroom management practices, instructional strategies, student motivation, and assessment strategies?
- \* Will using technology enable students/teachers to do something that they could not do before?
- \* Will the use of technology enable student/teachers to do something that they could do before but can do better (differently) now?
- \* How do we answer educators' concerns about its use?
- \* When is the use of technology an appropriate and effective use of tools

### **LAI 600 Curriculum Integration**

This course provides an overview of school programs with a general foundation of and orientation toward perspectives on historical development, educational research, curriculum organization, and current trends in the learning sciences that inform school curriculum. Students will discover the role educators play in the development and implementation of the curriculum. Students can expect to gain both a better understanding of curriculum theory as well as practical development of skills to design and implement high-quality curriculum that engages and empowers all learners.

\*\*Students in NYS Professional Licensure programs will apply principles of curriculum to their specific content area. For example, math teachers must utilize their knowledge of math to develop math related curricular items and ensure that mathematics is the focus of their work sample, and so on.

### **LAI 605 Critical Computational Literacies**

This course centers critical computational literacies as a framework for thinking about how and why we might teach K12 Computer Science (CS). Just as schools participate in broader social systems which shape our lives and which may or may not contribute to a more just and peaceful society, CS is only one part of the work of a school. Our work as CS educators may be constrained by other priorities and stakeholders, and our work can also reshape the work of the school beyond the classroom. We take as our starting point the premise that CS education is currently figured in a way which gives it unusual leverage to reshape K12 educational practice.

### **LAI 640 Designing Course Content Using Digital Resources**

This course examines strategies for developing effective digital course content. A systematic approach to the design, development, delivery, and evaluation of instruction for online/hybrid learners is emphasized. Students will be introduced to instructional design strategies and research findings pertaining to online/hybrid teaching and learning, and will apply this information through the development of online instructional materials. Special attention is given to courseware development using web tools and learning management systems.

### **LAI 671 Philosophy of Technology**

Philosophy of technology provides different perspectives on how technology interacts with the individual, society, institutions, economy, and culture. It explores concepts relevant to structure and practice, focusing on technology as a means and a means to an end. Thus, this course will focus on the writings of Jacques Ellul, Martin Heidegger, Don Ihde, Ivan Illich, Arnold Pacey, Joseph C. Pitt, and Edward Tenner among others. It will explore the cultural, institutional, and technical aspects of technology as mechanisms to understand and evaluate the

transformations that technologies undergo as they are moved through and interact with different dimensions of society. Using historical analysis of watersheds in medicine and transportation, the major foci are:

- The inherent nature of technology

- Technological progression and efficiency

- Technological tools as part of systems

- Dynamics of technology within communities

- Expertise as embedded within development and adoption of technology

Objectives

Students will: (1) Apply a critical approach to the development and use of technologies in various dimensions of societal institutions (e.g. classroom teaching and learning). (2) Approach technologies from a process, activity (design and development) and product lens. (3) Use a philosophy of technology framework to evaluate current research in their respective fields of interest (e.g. science, mathematics, literacy education). (4) Explore, evaluate and discuss research implications of a philosophy of technology framework.

### **LAI 679 Design of Student-Centered Learning Environments**

This course is designed to review theories and research on designing student-centered learning environments and implications of such for instruction in real-world classrooms and learning environments. The course features the most recent trends in learning and learning environment design, primarily through learning sciences and instructional technologies.

### **LAI 681 Understanding/Teaching Second Language Culture**

This course introduces major concepts, theories, and research related to cultural dimensions of second/foreign language education and supports students in developing a range of options for approaching culture in their own language teaching. Another main goal of the course is to provide students with the opportunity to investigate culture using qualitative methods. The main course objectives are: to closely examine the concept of culture, to explore, through discussion and research, how culture operates in human behavior and interaction and to become familiar with cultural and intercultural learning processes. By the end of the course, students will be able to define culture and discuss its role in language education and learning, explain a range of pedagogical options in approaching the teaching of culture in the language classroom and articulate their own approach to culture-in-language-teaching and develop principled pedagogical activities to be used in the classroom.