Inclusive Early Childhood Education

**College of Education**

**IECE 200. Introduction to Inclusive Early Childhood Education.** 1 credit.
This course is designed to introduce students to inclusive early childhood education as a profession. Students will become acquainted with professional ethics and standards, professional organizations and the roles and responsibilities of teachers in inclusive environments. Students will engage in observation of and reflection on practices in inclusive early childhood education.

**IECE 300. Programming and Practices in Inclusive Early Childhood Education.** 3 credits.
This course is designed to introduce students to the issues and trends in the education of all infants, toddlers and young children. It will provide the historical, philosophical, social and legal background for current practices in the field and will engage students in synthesizing and analyzing this information along with research as it pertains to professional practice. Prerequisite: Admission to teacher education pre-professional licensure program.

**IECE 301. Inclusive Early Childhood Education Programming and Practices Practicum.** 1 credit.
This practicum supports IECE 300. Students will further their understanding of the issues and trends impacting young children and their families in our community and evaluate their own perspectives and skills as they pertain to working with young children and families from diverse backgrounds, with diverse abilities and in diverse settings. Prerequisite: Admission to teacher education pre-professional licensure program.

**IECE 303. Development of Young Children Birth Through Age 8.** 3 credits.
This course provides students with an understanding of the development of infants, toddlers, and young children with and without exceptionalities. Skills for observing, recording and interpreting the behavior of the young child as a basis for adult intervention and guidance are developed.

**IECE 320. Development and Assessment of Infants.** 3 credits.
This course provides students with an understanding of the development of infants and toddlers with and without exceptionalities. Students will acquire knowledge and skills in authentic assessment to be used in decision making and service planning. Prerequisites: IECE 300 and IECE 301.

**IECE 321. Practicum Supporting the Development of Infants and Toddlers.** 2 credits.
This first intermediate field experience provides candidates opportunities to use their knowledge of child development to observe and assess children and then to plan meaningful learning environments and experiences for those children. Prerequisites: IECE 322 and IECE 324.

**IECE 322. Supporting the Development of Infants and Toddlers.** 3 credits.
This course explores, analyzes, and evaluates curriculum and methodology related to the design and management of a nurturing, supportive, and challenging learning environment for children ages 3-8 years. Emphasis is on the physical environment, design and selection of curricular components, the role of play in the curriculum, skills for professional intervention and interaction, and use of technology to facilitate young children’s learning. Prerequisites: IECE 320, IECE 321 and IECE 322. Corequisites: IECE 420 and IECE 421.

**IECE 423. Intermediate Field Experience in IECE II.** 2 credits.
This second intermediate field experience provides candidates opportunities to use their knowledge of child development and assessment to create learning environments and experiences for children. Candidates will learn more about the adult’s role in supporting children and managing behavior.

**IECE 450. Contemporary Family Issues in Inclusive Education.** 3 credits.
This course will examine how students’ own cultural values shape their interactions with children and families as well as provide concrete, practical strategies for effective and culturally competent interactions with children and families. Prerequisite: A “C” or better in IECE 324.

**IECE 460. Instructional Practices in Numeracy.** 3 credits.
This course provides students with the knowledge, skills, and understandings necessary to design and implement effective mathematics programs for young children, birth to age eight, with and without exceptionalities. Focus is on appropriate mathematical content, teaching strategies, and manipulative materials from a developmental perspective with special emphasis on adaptations designed to meet the needs of all children. Prerequisites: IECE 420, IECE 421, IECE 422 and IECE 423. Corequisites: IECE 461, IECE 462, IECE 464 and IECE 466.

**IECE 461. Advanced Field Experience in IECE.** 2 credits.
The first advanced field experience provides candidates opportunities to use their knowledge of child development to plan meaningful learning experiences. Candidates will learn how the adult’s role in supporting children to construct understandings about the natural and social sciences and to use mathematical thinking.

**IECE 462. Instructional Practices in Natural Sciences for Young Children.** 3 credits.
This course provides students with the knowledge, skills and understandings to design and implement effective natural science programs for all young children, birth to age eight. Focus is on appropriate science content, teaching strategies and materials from a developmental perspective with a special emphasis on adaptations designed to meet the needs of children with disabilities. Prerequisites: IECE 420, IECE 421, IECE 422 and IECE 423. Corequisites: IECE 480, IECE 481, IECE 484 and IECE 486.

**IECE 464. Instructional Practices in Social Studies for Young Children.** 3 credits.
This course provides students with the knowledge, skills and understandings to design and implement effective social studies programs for all young children, birth to age eight. Focus is on appropriate social studies content, teaching strategies, and materials from a developmental perspective designed to meet the needs of all young children. Students will use technology to support access to the learning environment and curriculum. Prerequisites: IECE 420, IECE 421, IECE 422 and IECE 423. Corequisites: IECE 480, IECE 481, IECE 482, and IECE 486.

**IECE 486. Seminar in Managing Classrooms and Guiding Behavior.** 1 credit.
This seminar examines research and professional literature on effective strategies for guiding young children’s behavior and managing groups. IECE 486 uses experiences in IECE 461 as a foundation for reflection, dialogue and development of a personal philosophy of classroom management. Prerequisites: IECE 420, IECE 421, IECE 422 and IECE 423. Corequisites: IECE 480, IECE 481, IECE 482 and IECE 486.

Individualized Study

**Outreach and Engagement**

**IS 200. Individualized Studies Major Program Development.** 3 credits.
An introductory course designed to prepare students for transition into higher education programs. Specific content includes focusing a concentration, selecting an academic adviser, creating an individualized program, technology in higher education, accessing career resources, career decision making skills, self-awareness, life planning, identifying college level experiential learning, documenting experiential learning, determining a credit request and organizing a portfolio for assessment. Prerequisite: Individualized studies majors and individualized studies special students only.

**IS 202. Orientation to Career and Life Planning.** 1 credit.
A short orientation course designed to prepare students for transition into higher learning education programs. Specific content includes accessing career resources, career decision-making skills, self-awareness and life planning.

http://www.jmu.edu/catalog/14
IS 203. Portfolio Development Workshop. 1 credit.
A short orientation course designed to prepare students for transition into higher learning education programs. Specific content includes identifying college-level expectations, documenting experiential learning, determining a credit request and organizing a portfolio for assessment. Prerequisite: Individualized studies majors and individualized studies special students only.

IS 250. Service Learning. 1-6 credits, repeatable to 6 credits.
Leadership, citizenship and professional competencies may be acquired through community service experiences. Documented service learning experience will be assessed by the Community Service Learning and credit awarded as appropriate. Prerequisite: IS 202.

IS 270. Selected Topics. 1-6 credits, repeatable.
In-depth study of selected topics with current importance and interest to lower division students that are not otherwise covered in the regular course offerings of academic units. Course content will vary. Prerequisite: Approval of the “Course Agreement Form” by the Individualized Study department head.

IS 275. Dollars and Sense. 3 credits.
This practical course will review the affect a personal philosophy on money, and management of personal finances, has on all aspects of life when it comes to securing the American Dream. Students will learn real life skills in the areas of eliminating debt, creating a budget, understanding investments and insurance, saving money, planning for retirement, shopping for a house and other topics dealing with financial issues faced in daily life.

IS 290. Special Studies. 1-6 credits, repeatable.
Designed to give students an opportunity to do lower-division independent study in selected interdisciplinary areas under the supervision of a faculty member in the appropriate academic unit. Prerequisite: Approval of the “Course Agreement Form” by the Individualized Study department head.

IS 300. Sponsored Learning. 1-6 credits, repeatable.
A structured learning activity related to a student’s area of study and sponsored by an employer, volunteer agency or other appropriate organization. Prerequisite: Approval of the “Course Agreement Form” by the Individualized Study department head.

IS 480. Cooperative Studies. 1-6 credits, repeatable.
Two or more upper-level students may elect to study cooperatively in a selected area of current importance and interest under the supervision of a faculty member in the appropriate academic unit. Prerequisite: Approval of the “Course Agreement Form” by the Individualized Study department head.

IS 498. Special Studies. 1-6 credits, repeatable.
Designed to give students an opportunity to do upper-division independent study in selected interdisciplinary areas under the supervision of a faculty member in the appropriate academic unit.

IS 498. Bachelor of Individualized Study Project. 3-6 credits.
An in-depth study of an interdisciplinary topic directly related to the student’s areas of concentration. A final oral report is required. Prerequisite: Approval of the “Course Agreement Form” by the Individualized Study department head.

IS 499. Honors. 6 credits.
Multiple-semester course. Prerequisite: Approval of the “Course Agreement Form” by the Individualized Study Department head.

Industrial Design
School of Art, Design and Art History
All INDU courses are restricted to declared art, art history, graphic design, and interior design majors in art and art history during the fall and spring semesters. During May and summer sessions, INDU courses are open to all students of eliminating debt, creating a budget, understanding investments and insurance, saving money, planning for retirement, shopping for a house and other topics dealing with financial issues faced in daily life.

INDU 220. CAD: 3D Modeling. 3 credits.
This course will introduce students to principles used in 3D Cad and BIM modeling. Technologies to draw three dimensionally on the computer will be considered as a discipline within itself, and students will be instructed to use the machine for design exploration. Various software packages will be utilized during the semester.

Independent activity at the intermediate level, such as research or studio practice, under faculty supervision. Projected studies in any area of the school’s offering must be arranged with the instructors who will direct them. Offered only with the consent of the instructor.

INDU 392. Topics in Industrial Design. 3 credits.
Study of selected topics in art, art history, graphic design, interior design, or industrial design at the intermediate level. May be repeated when course content changes. See e-campus for current topics.

INDU 490. Independent Studies Industrial Design. 1-3 credits, repeatable.
Offering varies.
Independent activity, such as research or studio practice, under faculty supervision. Projected studies in any area of the school’s offering must be arranged with the instructors who will direct them. Offered only with the consent of the instructor.

INDU 491. Studio Assistant. 1-3 credits, repeatable. Offering varies.
An on-campus program monitored on an individual basis designed to provide practical studio experience in the visual arts. Students will learn studio practices and management skills, including material use, inventory control and the proper operation of equipment found within various individual classroom studios. Prerequisites: Permission of the instructor.

INDU 492. Topics in Industrial Design. 3 credits. Offering varies.
Study of selected topics in industrial design at the advanced level. May be repeated when course content changes. See MyMadison for current topics.

INDU 498. Internship in Industrial Design. 1-8 credits.
An off-campus program prepared and monitored on an individual basis. Internships are designed to provide practical experience in the arts. Prerequisites: Permission of the instructor.

Integrated Science and Technology
Department of Integrated Science and Technology
First Year Student – Sophomore Sequence

GISAT 100. Environmental and Energy Sustainability. 3 credits.
This course explores scientific and technical issues important to environmental and energy sustainability. Students study fundamental chemistry and physics and then apply this knowledge to better understand air quality, water quality, and conventional and alternative energy processes. The class also explores the societal impacts of our energy choices and the potential impact we as individuals can have through personal initiative.

ISAT 101. ISAT Freshman Seminar. 1 credit.
This seminar course will introduce the ISAT curriculum and career options to freshmen students and will describe how various elements of the curriculum and available ISAT elective sequences in each technology sector relate to the goals and objectives of the program. Prerequisite: Freshman standing at JMU.

GISAT 112. Environmental Issues in Science and Technology (2, 2).
4 credits.
This course integrates the study of biology, chemistry and statistics within the context of environmental issues that include ozone depletion, acid rain, global warming, waste management and biodiversity.

GISAT 113. Biotechnology Issues in Science and Technology (2, 2).
4 credits.
This course introduces current topics in the life science technologies through lecture and laboratory exercises. Topics include advances in genetic engineering, the hierarchy of life and the rise of infectious diseases.

ISAT 131. Technology, Science and Society (1, 2). 3 credits.
This course introduces the social aspects of technology and science. It covers social science methods and related philosophical and ethical analyses. Students learn how the practice of science relates to the human-built world and why critical evaluations of science and technology policies are important.

GISAT 141. Analytical Methods. 4 credits.
This course introduces the student to science and the scientific method; introductory statistics and graphical data analysis, with emphasis on using the computer for managing data and for empirical modeling; functions for modeling real-world systems; critical thinking skills for analyzing arguments involving data; project management.

ISAT 150. Algebra Essentials. 1 credit.
This course provides review and practice in algebra concepts that are needed to successfully complete GISAT 151. Various mathematical models, including trigonometric, are also reviewed. The course is designed for students who possess a basic understanding of algebra but are not proficient in its application. Prerequisite: Permission of the instructor. Corequisite: GISAT 151 and permission of the instructor.