ISAT 499C. Senior Honors Thesis III. 3 credits.
Third course in a three-course sequence. Student completes the research for and prepares an oral and written presentation of their results for an independent research project that meets the requirements set forth by the Honors program. Student completes and presents (in written and oral form) the project described in his or her proposal from ISAT 499A. Fulfills same requirements as ISAT 493.

Intelligence Analysis
College of Integrated Science and Technology
IA 200. Introduction to National Security Intelligence. 3 credits.
Intelligence analysis is a complex, dynamic process that includes determining the intelligence needs, data collection, pre-processing, analysis and production of the customer's product. This is an introduction to the history, structure and practices of the national security intelligence community (NSIC). The course is team-oriented, project-based and grounded in the relevant legal and ethical context.
IA/CIS 210. Introduction to Global Competitive Intelligence. 3 credits.
This course will focus on global competitive intelligence (CI): the tools and methods that enhance strategic and tactical decision making in the analysis and interpretation of business data related to current and emerging competitors. The course is team-oriented, project-based and grounded in the relevant legal and ethical context. Not open to students in the College of Business.
IA 261. Hypothesis Testing. 3 credits.
Examines hypothesis testing in national, military, counter, and competitive intelligence. By comparing alternate theories in terms of their explanatory power and predictive success, students will learn the most relevant methods for integrating facts into unified theories, assessing theories, and properly qualifying and reevaluating theories to compensate for risk and uncertainty.
IA 280. Selected Project in Intelligence Analysis. 3 credits.
This course will examine projects of interest to lower-division students in intelligence analysis not otherwise offered in regular course offerings. They are offered only with the approval of the program director and they may be repeated when course content changes. Students should consult with the instructor prior to enrolling in the course. Prerequisite: Junior standing.
IA/PHIL 312. Causal Analysis. 3 credits.
Examines causal analysis in national, military, counter, and competitive intelligence. By assessing a factor's amount and kind of efficacy, students will learn the most reliable methods for distinguishing between relevant/irrelevant events and factors, identifying and excluding "pseudo-causes," and anticipating higher order effects of a causal process.
IA/PHIL 313. Counterfactual Reasoning. 3 credits.
Examines counterfactual reasoning in national, military, counter, and competitive intelligence. By analyzing alternate scenarios and their consequences, students will learn the most relevant methods for employing creative thinking in generating, developing, and assessing possibilities; substantiating "after-action" reports, and structuring futures analysis.
IA/PHIL 314. Strategy Assessment. 3 credits.
Examines strategy assessment in national, military, counter, and competitive intelligence. By applying probabilities and goals to potential threats and opportunities (short and long-term), students will learn the most relevant methods for formulating and evaluating possible courses of action, and explaining and explaining actions by assessing an agent's strategic interests and circumstances.
IA 340. Data Mining, Modeling and Knowledge Discovery. 3 credits.
Data mining is the nontrivial extraction of previously unknown and potentially useful information from (large) data sets to help explain current behaviors and anticipate future outcomes. Students will apply data mining and knowledge discovery methods to data sets from business, industry and government. The course is team-oriented, project-based and grounded in the relevant legal and ethical context. Prerequisites: ISAT 251 or MATH 220 and ISAT 252.
IA 341. System Dynamics Modeling, Simulation and Analysis. 3 credits.
System dynamics analysis is a perspective and a set of conceptual and computing tools to help us understand the structure and dynamics of complex systems. This course will apply system dynamics analysis to complex systems (problems) that involve the interplay of physical and social-political factors. The course is team-oriented, project-based and grounded in the relevant legal and ethical context. Prerequisites: ISAT 251 or MATH 220 and ISAT 252.
IA 342. Visualization Methods, Technologies and Tools for Intelligence Analysis. 3 credits.
Data visualization presents laboratory or simulation data or the results from sensors out in the field in a way that aids reasoning about and hypothesis building in complex data sets. This course will apply data visualization technologies and tools to timely data sets from business, industry and government. The course is team oriented, project based and grounded in the relevant legal and ethical context. Prerequisites: GISAT 251 or MATH 220 and ISAT 252.
IA/REL 383. Apocalypticism, Religious Terrorism and Peace. 3 credits.
This course traces apocalypticism from its ancient Jewish and Christian roots to its contemporary manifestations in religious groups around the world. Since apocalypticism is a worldview that transcends religious traditions, the course covers a variety of religious groups. The last half of the course focuses on the complex relationships between apocalyptic thinking and religious terrorism and entails an independent research project.
IA 400. Cognitive Science and Intelligence Analysis. 3 credits.
Cognitive science examines a wide range of mind/brain processes, including thinking, learning, language acquisition, pattern recognition, memory, creativity, volition, etc. This course will take an information processing systems approach to study cognitive processes that comprise intelligence analysis. The course is team oriented, project based and grounded in the relevant legal and ethical context. Prerequisites: GISAT 251 or MATH 220 and ISAT 252; IA 340 and either IA 341 or IA 342.
IA 405. Ethics, Law and Intelligence Analysis. 3 credits.
This course will examine ethical and legal issues raised in the practice of intelligence analysis. It will draw on philosophical ethical theories and reasoning to explicate the issues addressed, and will explore the relevant constitutional and other legal constraints on the practice of intelligence analysis, particularly issues of information privacy, civil liberties and limitations on government action. Prerequisite: Senior standing.
IA 440. Seminar on Issues in Intelligence Analysis. 3 credits.
This course will focus on important issues in the theory and practice of intelligence analysis as the basis for implementing team projects in the IA Capstone Seminar. Students will individually identify, analyze, plan and report on a feasible capstone seminar project. Students will then organize teams and develop plans to complete a subset of the most promising projects in the Capstone Seminar. Prerequisite: Senior standing in the IA Program.
IA 450. Capstone Project in Intelligence Analysis. 3 credits.
Building on the Seminar on Issues in Intelligence Analysis students will complete and present solutions for team-based intelligence community or competitive intelligence IA projects. Students will produce written and oral technical reports/briefs of their results. Prerequisite: IA 440.
IA 480. Selected Topics in Intelligence Analysis. 3 credits.
This course will examine topics of interest to upper-division students in intelligence analysis not otherwise offered in regular course offerings. They are offered only with the approval of the program director and they may be repeated when course content changes. Students should consult with the instructor prior to enrolling in the course. Prerequisite: Junior standing.

Interdisciplinary Liberal Studies
Interdisciplinary Liberal Studies
IDLS 350. Literacy and Society. 3 credits.
An exploration and analysis of societal literacy practices as viewed through cognitive, cultural, class, workplace, and technological lenses. Prerequisite: GWRTC 103 or equivalent.
IDLS 391. Study Abroad. 1-6 credits.
Credit for academically-grounded, interdisciplinary study abroad. Students seeking credit must secure the approval of the department head and a faculty supervisor who will provide the academic structure, assignments and student evaluation.
IDLS 395. Topics in Interdisciplinary Liberal Studies. 1-6 credits.
Examination of selected interdisciplinary topics of importance to teacher education content areas. May be taken for a maximum of six credit hours toward the major.

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IDLS 400. Seminar in Liberal Studies. 3 credits.
Capstone seminar for IDLS students in the humanities/social sciences content area. Students will apply different disciplinary perspectives to a single topic. Course requirements will emphasize superior written and oral communication skills and the integration and application of content area knowledge to the teaching environment. Prerequisites: Students must have completed their ICLS core requirements and be within one course of completing the track. Education students should be in their third semester of their teacher education program.

IDLS 486. Internship and Field Experience. 1-6 credits.
IDLS credit for academically-grounded internships and field experiences. Students seeking credit must secure the approval of the department head for the use of academic structures, assignments and evaluation plans provided by qualified internship or field experience supervisors.

IDLS 490. Independent Study in Interdisciplinary Liberal Studies. 3 credits.
Individualized projects in interdisciplinary liberal studies. Prerequisite: Permission of the instructor.

IDLS 499A, B and C. Honors. 1-6 credits.

Interdisciplinary Social Science
Cross Disciplinary Studies
ISS 200. Introduction to the Social Sciences. 3 credits.
The course serves as an introduction to the social sciences. It includes a review of the general content of selected social sciences with emphasis on primary foci, methods employed and perspectives guiding each disciplinary approach. The course will vary each semester according to the interests and specialization of the instructor(s).

ISS 300. Experiential/Service Applications. 3 credits.
Provides students with practical work experience through an internship, service learning program, etc. This experience culminates in the application of knowledge and skills emerging from previous courses. Prerequisite: Junior standing.

ISS 330. Maps, Money and World Trade. 3 credits.
This is an interdisciplinary class designed to help students, especially future teachers, integrate perspectives from various disciplines, especially history, geography, and economics, into a coherent account of an increasingly globalized world. We will pay particular attention to map construction and use (both historical and contemporary) and the relationship between economic ideas and world events, focusing on a variety of case studies over the last millennium.

ISS 400. Senior Seminar in Social Science. 3 credits.
The course builds upon all previous course listings and serves as the final integrating experience providing closure to the interdisciplinary social sciences. Students are expected to integrate theories, research and/or methods from several social science disciplines to present a senior level research paper. The course will vary each semester according to the interests and specialization of the instructor.

Interior Architecture
School of Art, Design and Art History
All 200-level IARC courses are restricted to declared art, art history, graphic design and interior design majors during the fall and spring semesters: IARC courses at the 300-level and above are restricted to declared IARC majors. During May and summer sessions, IARC courses are open to all students who meet the additional stated course prerequisites. Non-majors wishing to enroll in an IARC course during the fall and spring semesters may request permission of the instructor.

This studio focuses on the design process through the creation of objects and interior spaces. Projects involve investigations into syntax and design language, program interpretation, materiality, ritual, use and the constructed order of built space. Emphasis is placed on experimentation, risk and play. Design projects will incorporate constructed drawings, sketching, diagramming, model-building, and writing.

IARC 202. Interior Architecture Studio II. 6 credits.
Design studio building on the fundamentals of IARC 200. Projects will address both three-dimensional design of spaces and the objects within the spaces. Projects will include questions of ritual, ergonomics, material properties, mechanism, and prototypes. Introduction of workshop, digital graphics and photography incorporated into studio work, with an emphasis on fabrication and constructed full-scale objects. Prerequisite: IARC 200.

IARC 208. Portfolio Review. 3 credits.
Portfolio review required to enroll in interior architecture courses at 300 level and above. Prerequisite: IARC 200. Corequisite: IARC 202.

IARC/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.

IARC 300. Interior Architecture Studio III. 6 credits.
Intermediate design studio building upon skills of IARC 200-202 sequence. Projects will be of greater complexity, scope and technical requirement. The design studios will incorporate drawing, diagramming, models, digital studies and writing. Legal, industry and engineering requirements will be integrated into the learned poetics of design. Prerequisite: IARC 208.

IARC 302. Interior Architecture Studio IV. 6 credits.
Intermediate design studio building upon skills of IARC 300. Projects will be an extension of IARC 300 but with greater complexity, scope and technical requirements. Design studios will incorporate drawing, diagramming, models, digital studies and writing. Legal, industry and engineering requirements will be integrated into the learned poetics of design. Prerequisite: IARC 300.

IARC 330. Materials and Methods I. 3 credits.
A lecture course introducing components and materials used in construction and building systems. Prerequisite: IARC 209.

IARC 332. Materials and Methods II. 3 credits.
The second lecture class in a required sequence focused on building systems and materials. Topics introduced in INDE 330 are studied in greater depth with an emphasis on understanding the interrelationships among elements found in a complete construction documents package. Prerequisite: IARC 330.

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.

IARC 392. Topics in Interior Architecture. 3 credits. Offering varies.
Study of selected topics in interior design at the intermediate level. May be repeated when course content changes. See MyMadison for current topics.

IARC 400. Interior Architecture Studio V. 6 credits.
An upper-level design studio building upon the design rigor and technical craft acquired in the IARC 300-302 sequence. Expansion of the design role into collaborative teams, interdisciplinary teams, actual clients, service projects and competition projects. Prerequisite: IARC 302.

IARC 402. Interior Architecture Studio VI. 6 credits.
Final upper-level interior design studio culminating in a thesis project. Complete student initiative across every phase of the project. Prerequisite: IARC 400.

IARC 440. Professional Design Practices. 3 credits.
Procedures and practices in the interior design profession. Prerequisite: IARC 392 or permission of instructor.

IARC 470. Contemporary Design Theory. 3 credits.
Seminar format class which explores influential ideas in contemporary design, including critical regionalism, modernism, minimalism, the neo-avant-garde, green design, Marxism and post-structuralism. Prerequisite: GARTH 206.

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 consent of the instructor.

IARC 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 safe studio practices and management skills, including material use, inventory control, and the proper operation of equipment found within various individual classroom studios. Prerequisite: Permission of the instructor.

IARC 492. Topics in Interior Architecture. 3 credits. Offering varies.
Study of selected topics in interior design at the advanced level. May be repeated when course content changes. See MyMadison for current topics.

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