ART 452. Informational Aesthetics I. 4 hours.
Introduction to information visualization and programming in the context of art and design. Project oriented course using computer code and custom software for information analysis, representation and creative expression. Course Information: Same as DES 452. 4 hours. May be repeated to a maximum of 8 hours. Extensive computer use required. Prerequisite(s): DES 319 or DES 322 and sophomore standing or above; or consent of the instructor. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

ART 453. Informational Aesthetics II. 4 hours.
Intermediate course emphasizing the database as cultural form. Creative projects and research in information aesthetics through date driven two, three and four dimensional visualizations and custom computer interfaces. Course Information: Same as DES 453. 4 hours. May be repeated for maximum of 8 hours. Extensive computer use required. Prerequisite(s): DES 452 or ART 452 and junior standing or above; or consent of instructor. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

ART 454. 3D Space I: Modeling. 4 hours.
Introduction to 3D modeling, texturing, lighting and rendering. Students develop a cross-media skill set that can be used for visualizing sculptural and/or architectural installations, filmic animation and compositing, gaming and object design. Course Information: Previously listed as AD 454. Extensive computer use required. Prerequisite(s): Consent of instructor. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

ART 455. 3D Space II: Animation. 4 hours.
Continuation of 3D Space I: Modeling. Includes a focus on environment design with advanced texturing, lighting, rendering and particles. Course Information: Previously listed as AD 455. May be repeated for maximum of 8 hours. Extensive computer use required. Prerequisite(s): AD 454; or consent of instructor. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

ART 456. Embedded Media: Physical Computing. 4 hours.
A practical and conceptual exploration into electronic sensors, processors and actuators as applied to interactive media. Course Information: Previously listed as AD 456. May be repeated for a maximum of 8 hours. Extensive computer use required. Prerequisite(s): AD 205; and junior standing or above; or consent of instructor. Class Schedule Information: To be properly registered, students must enroll in one Laboratory-Discussion and one Conference.

ART 457. Interactive 3D. 4 hours.
An introduction to real-time interactive art theory and to the design and production practices used in creating 3D applications for games and the web. Course Information: Previously listed as AD 457. Extensive computer use required. Prerequisite(s): Junior standing or above; or consent of instructor. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

ART 458. Advanced Interactive 3D. 4 hours.
Advanced theory and practice of real-time interactive art and producing 3D applications for games and the web. Conceptualization, planning, and development of interactive 3D and virtual reality environments. Course Information: Previously listed as AD 458. Extensive computer use required. Prerequisite(s): ART 457; and junior standing or above; or consent of instructor. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.
ART 460. Advanced Independent Projects: Photography. 4 hours. A practical and conceptual exploration into independent individual projects in contemporary photography. Course Information: Field trips required at a nominal fee. Field work required. Prerequisite(s): ART 260; and consent of the instructor. Class Schedule Information: To be properly registered, students must enroll in one Lecture-Discussion and one Practice.

ART 470. Adv Projects: Moving Image. 4 hours. A practical and conceptual exploration into possibly long form, longer-term individual or collaborative projects in contemporary film and/or video. Course Information: Field trips required at a nominal fee. Field work required. Prerequisite(s): Credit or concurrent registration in ART 272; and junior standing or above; and consent of the instructor. Class Schedule Information: To be properly registered, students must enroll in one Lecture-Discussion and one Practice.

ART 480. Independent Study in Art. 0-5 hours. Intensive workshops in specific art related topics and techniques directed and announced by the instructor. Course Information: 1 to 4 undergraduate hours. 2 to 5 graduate hours. May be repeated. Previously listed as AD 406. Prerequisite(s): Junior or graduate standing; and consent of the instructor. Class Schedule Information: To be properly registered, students must enroll in one Laboratory and one Lecture.

ART 484. Educational Practicum with Seminar I. 6 hours. The first half of a two-segment sequence of practice teaching, including seminar, to meet certification requirements for teaching in grades nine through twelve. Course Information: Graduate credit only with approval of the School of Art and Art History. Field work required. Prerequisite(s): Grade of B or better in ART 210 and Grade of B or better in ART 310 and Grade of B or better in ART 410; and senior standing or above; and approval of the department and approval of the Council for Teacher Education. Class Schedule Information: To be properly registered, students must enroll in one Lecture-Discussion and one Practice.

ART 485. Educational Practicum with Seminar II. 6 hours. The second half of a two-segment sequence of practice teaching, including seminar, to meet certification requirements for teaching in grades nine through twelve. Course Information: Graduate credit only with approval of School of Art and Art History. Field work required. Prerequisite(s): Grade of B or better in ART 210 and Grade of B or better in ART 310 and Grade of B or better in ART 410; and senior standing or above; and approval of the department and approval of Council for Teacher Education. Class Schedule Information: To be properly registered, students must enroll in one Lecture-Discussion and one Practice.

ART 490. Art and the Collective Impulse. 4 hours. Art is collective and social endeavor. This course traces the legacy of group work and artist collectives with a focus on developing successful models for collaboration and participation. Course Information: Field trips required at a nominal fee. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

ART 499. Art Internship. 0-4 hours. Introduction to professional practice offering students the opportunity to couple academic learning with professional experience in an off-campus placement. Course Information: Satisfactory/Unsatisfactory grading only. May be repeated. Only 8 hours of credit may apply toward Art major requirements. Requirements for the organization offering an internship: understanding/agreement that a student intern is an artist in training (not a volunteer, not a freelancer) positions are paid (at or above federal minimum wage) student is seeking professional experience (not a portfolio piece) setting is a studio environment (the student is not the only artist on site) 15 hours per week expected, 20 hours per week maximum. Prerequisite(s): Approval of the Department.

ART 500. Art Teaching Internship. 0-2 hours. Practical and theoretical aspects of teaching lecture/lab studio, and/or seminar courses in Art. Course Information: Previously listed as AD 500. May be repeated. Prerequisite: Consent of the instructor and consent of the Director of Graduate Studies. Class Schedule Information: To be properly registered, students must enroll in one Conference and one Practice.

ART 508. Advanced Electronic Visualization and Critique. 4 hours. Individualized graduate study; creative projects and research in electronic visualization through a consultive agreement with graduate faculty committee. Course Information: Previously listed as AD 508. May be repeated for credit. Prerequisites: Graduate standing and approval of the School graduate faculty committee. Class Schedule Information: To be registered properly, students must enroll in one Laboratory and one Conference.

ART 509. Advanced New Media Arts. 0-5 hours. Individualized graduate study; creative projects and research in new media arts through a consultative agreement with graduate advisor. Course Information: Previously listed as AD 509. May be repeated for credit. Prerequisites: Graduate standing and consent of the School graduate faculty committee and the student's advisor. Class Schedule Information: To be registered properly, students must enroll in one Laboratory and one Conference.

ART 520. Seminar in Contemporary Theory. 4 hours. Developments and current issues in contemporary design, studio and media arts: major philosophies, debates, and social/environmental aspects (may include visiting lecturers, critics, and discussants). Course Information: Previously listed as AD 502. Must be repeated for a minimum of 16 hours. Prerequisites: Graduate standing and consent of the School, graduate faculty committee, and the student's advisor. Class Schedule Information: To be registered properly, students must enroll in one Conference.

ART 530. Advanced Graduate Critique. 4 hours. Individualized graduate study; creative projects and research by each student through consultive agreement with graduate faculty committee. Course Information: Previously listed as AD 530. May be repeated for credit. Prerequisites: Graduate standing and approval of the School graduate faculty committee. Class Schedule Information: To be registered properly, students must enroll in one Lecture and one Discussion.

ART 531. Advanced Studio Arts. 5 hours. Individualized graduate study; creative projects and research in studio arts by each students through consultive agreement with graduate advisor. Course Information: Previously listed as AD 531. May be repeated for credit. Prerequisites: Graduate standing and consent of the School graduate faculty committee and the student's advisor. Class Schedule Information: To be registered properly, students must enroll in one Laboratory and one Conference.
ART 560. Advanced Photography and Critique. 4 hours.
A forum for presenting and discussing individual work with all
photography graduates and faculty participating. Course Information:
Previously listed as AD 560. May be repeated for credit. Prerequisites:
Graduate standing and approval of the School graduate faculty
committee. Class Schedule Information: To be registered properly,
students must enroll in one Laboratory and one Discussion.

ART 561. Advanced Photography. 5 hours.
Individualized graduate study; creative projects and research in
photography by each student through consultive agreement with
graduate advisor. Course Information: Previously listed as AD 561. May
be repeated for credit. Prerequisites: Graduate standing and consent of
the School graduate faculty committee and the student's advisor(s). Class
Schedule Information: To be registered properly, students must enroll in
one Laboratory and one Conference.

ART 570. Advanced Moving Image and Critique. 4 hours.
Individualized graduate study; projects for creative research in film,
video, and animation by each student through conference and consultive
agreement with graduate faculty committee. May involve supportive
consultation in other areas. Course Information: Previously listed as
AD 540. May be repeated for credit. Prerequisites: Graduate standing
and approval of the School graduate faculty committee. Class Schedule
Information: To be registered properly, students must enroll in one
Laboratory and one Conference.

ART 571. Advanced Moving Image. 5 hours.
Individualized graduate study; projects for creative research in film,
video, and animation by each student through consultive agreement
with advisor. May involve supportive consultation in other areas. Course
Information: Previously listed as AD 571. May be repeated for credit.
Prerequisites: Graduate standing and consent of the School graduate
faculty committee and the student's advisor. Class Schedule Information:
To be registered properly, students must enroll in one Laboratory and
one Conference.

ART 597. Master's Project. 0-16 hours.
Independent research under faculty supervision in a specific area of
interest. Course Information: Previously listed as AD 597. May be
repeated for a maximum of 16 hours. Prerequisites: 20 hours of 500-level
courses and consent of the instructor.