468 **Computer Graphics**

Spring. 4(0-8) P:M: (STA 360)

The computer as a medium for visual communication design. Experimentation with drawing, painting and solid modeling applications.

Still Photography

Fall, Spring. 4(2-4) P:M: (STA 370)

Control of black and white photographic materials through advanced camera and darkroom techniques. View camera principles and use. Print handcoloring and archival processing. Contemporary form and content issues.

472 Color Photography
Spring. 4(2-4) P:M: (STA 370)
Principles of color photography. Vision, perception, and photographic science and art. Effect of color on content. Color negative process and printing.

474 **Photography Studio Lighting**

Fall. 4(2-4) P:M: (STA 370)

The photographer's balance of still life and portrait composition and controlled lighting with personal interpretation of subject matter. Lighting theory, technique, and equipment.

Photography Workshop

Spring. 4(1-6) P:M: (STA 370)

Non-traditional photographic processes and concepts. Non-silver printmaking, electronic still imaging, computer manipulation, video production, and slide-sound productions.

Art Experiences with Children and 481 Youth: Elementary

Fall. 5(1-8) P:M: Completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of Art with a teacher certification option.

Art teaching in the Saturday Art Program. Emphasis on elementary experiences. Planning and writing art

482 Art Experiences with Children and Youth: Secondary

Spring. 6(2-8) P:M: Completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of Art with a teacher certification option.

Art teaching in the Saturday Art Program. Emphasis on secondary experiences. Planning and writing art curriculum.

490 Independent Study

Fall, Spring. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. R: Approval of department.

Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings.

Selected Topics - Painting

Spring. 2 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P:M: (STA 320) R: Approval of department.

Issues of technique, style, and content in painting.

491B Selected Topics - Printmaking

Spring. 2 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P:M: (STA 430 or STA 431 or STA 432 or STA 433 or STA 435) R: Approval of department.

Issues of technique, style, and content in printmak-

491C Selected Topics - Ceramics

Spring. 2 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P:M: (STA 345)

Issues of technique, style, and content in ceramics.

Selected Topics - Sculpture

Spring. 2 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P:M: (STA 350 or STA 351 or STA 354 or STA 355) R: Approval of department.

Issues of technique, style, and content in sculpture.

Selected Topics - Graphic Design

Spring. 2 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P:M: (STA 360) R: Approval of department.

Issues of technique, style, and content in graphic design.

Selected Topics - Photography

Fall of odd years. 2 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P:M: (STA 370) R: Approval of department.

Issues of technique, style, and content in photogra-

492 Senior Seminar and Professional Practice (W)

Fall, Spring. 2(2-0) P:M: Completion of Tier I writing requirement. R: Open only to seniors in the Studio Art major. C: STA 492A concurrently.

Capstone course for artists and designers. Writing as a mode of issue delineation and definition.

Exhibition Practicum

Fall, Spring. 1(1-1) P:M: Completion of Tier I writing requirement. C: STA 492 concur-

Exhibition experience in studio art. Audience delineation. Conceptualization. Use of space. Evaluation.

493 Design Internship

Fall, Spring. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course. P:M: (STA 460 or STA 462 or STA 463 or STA 464 or STA 465 or STA 466 or STA 467 or STA 468) RB: and one other 400 level graphic design course. R: Approval of department, contract required prior to registration.

Field experience in a working design environment under supervision of a design professional: art director, graphic designer, or photographer.

Design Center

Fall, Spring. 4(0-8) P:M: (STA 460 or STA 462 or STA 463 or STA 464 or STA 465 or STA 466 or STA 467 or STA 468) RB: and one other 400 level graphic design course. R: Approval of department, contract required prior to registration.

Practicum in design problem solving, including extensive contact with selected clients at a professional level.

495 Workshop in Studio Art Practice

Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 4 credits in all enrollments for this course. RB: Upper level studio art major. R: Open only to juniors or seniors or graduate students in the Studio Art major or approval of department. Written contract required.

In-depth study of a specific technique or theoretical artistic practice.

TEACHER **EDUCATION**

TE

Department of Teacher Education College of Education

Reflections on Learning

Fall, Spring, Summer. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education.

Students' experiences as learners in comparison to psychological, sociological, and anthropological theories and assumptions about learning and teaching in and out of school.

Diverse Learners in Multicultural Perspective

Fall, Spring, Summer. 3(2-2) Interdepartmental with Counseling, Educational Psychology and Special Education. Administered by Department of Counseling, Educational Psychology, and Special Education. Not open to students with credit in TE 250.

Communicative, linguistic, physical, sensory, behavioral, affective, and cognitive differences in learning in multicultural classrooms. Factors that mediate access to knowledge.

250 Human Diversity, Power, and **Opportunity in Social Institutions**

Fall, Spring, Summer. 3(3-0)

Comparative study of schools and other social institutions. Social construction and maintenance of diversity and inequality. Political, social and economic consequences for individuals and groups.

Learners and Learning in Context (W)

Spring. 4(3-4) P:M: Completion of Tier I writing requirement. RB: (TE 150) And (TE 250 Or CEP 240) R: Not open to freshmen or sophomores. Open only to students admitted to the teacher certification program.

Role of social context and sociocultural background in learning. Natural and socially constructed differences among learners. Relationship among subjectspecific knowledge, teaching and learning that subject, and the institutional and communal context. Multiple literacies.

311 Growing Up and Coming of Age in Three Societies (D)

Fall of odd years. 3(3-0) RB: One IAH course, one ISS course, completion of Tier I writing requirement. R: Not open to freshmen and sophomores. SA: TCC 305

Diverse disciplinary and cultural perspectives of childhood and youth. Continuity and change in families and schools. Factors such as ethnicity, race, gender, and political philosophies. Focus on three contrasting societies.

348 Reading and Responding to Children's Literature

Fall, Spring, Summer. 3(3-0)

Literary understanding and genres in reading and teaching children's literature. Critical and theoretical perspectives in evaluating children's literature. Children's responses to literature. Literary, social, and pedagogical issues in the study of children's literature.

401 Teaching of Subject Matter to Diverse Learners (W)

Fall. 5(3-8) P':M: (MTH 201) and completion of Tier I writing requirement. RB: (MTH 202 and TE 301) R: Not open to freshmen or sophomores. Open only to students admitted to the teacher certification program.

Examining teaching as enabling diverse learners to inquire into and construct subject-specific meanings. Adapting subject matter to learner diversity. Exploring multiple ways diverse learners make sense of the curriculum.

402 Crafting Teaching Practice (W)

Spring. 6(4-8) P:M: Completion of Tier I writing requirement. RB: (TE 401) R: Not open to freshmen or sophomores. Open only to students admitted to the teacher certification program.

Gathering data on learners to inform content and instructional decisions. Deciding what should be taught for specific disciplines. Teachers' multiple roles and their professional, intellectual, sociopolitical, and communal responsibilities.

490 Independent Study in Teacher Education

Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Not open to freshmen or sophomores. Open only to students admitted to the teacher certification program. Approval of department.

Supervised individual or small group study of the practice of teaching.

491 Special Topics in Teacher Education

Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Not open to freshmen or sophomores. Open only to teacher certification candidates.

Aspects of teaching practice and inquiry into practice.

494 Field Experience in Teacher Education

Fall, Spring. 1 to 10 credits. A student may earn a maximum of 10 credits in all enrollments for this course. R: Approval of department.

Supervised practica and/or observations in educational settings.

495 Student Teaching in Music

Fall, Spring. 9 credits. Interdepartmental with Music. Administered by School of Music. R: Open only to seniors in the Bachelor of Music Education major.

Supervised music teaching experience in schools. On-campus seminar required.

TELECOMMUNICATION TC

Department of Telecommunication College of Communication Arts and Sciences

100 The Information Society

Fall, Spring, Summer. 3(3-0)

Technological, industry and social trends in the information society. Telecommunication industries. Social policy involving information technologies and information services, including television, radio, cable TV, telephone, the Internet, New Media.

200 History and Economics of Telecommunication

Fall, Spring, Summer. 4(4-0) P:M: (TC 100 and EC 201 or concurrently)

Institutional, economic and content development of telecommunication including broadcasting, cable, new video technologies, and telephone and data transmission.

201 Introduction to Telecommunication Technology

Fall, Spring, Summer. 4(4-0) P:M: (CSE 101 or concurrently and CSE 131 or concurrently and CTC 100) and (MTH 106 and MTH 110 and MTH 116 and MTH 124 and MTH 132 and MTH 152H and MTH 201 and STT 200 and STT 201) or (MTH 103 and MTH 114) or designated score on Mathematics placement test

Operational principles of audio, data and video telecommunication technologies.

240 Introduction to Digital Media Arts

Fall, Spring, Summer. 3(2-2) R: Open only to students in the Department of Telecommunication.

Principles, processes, techniques and technology involved in the making of media messages, particularly in video, audio and digital media.

310 Basic Telecommunication Policy

Fall, Spring, Summer. 4(4-0) P:M: (TC 100 and TC 200 and TC 201)

Policy in information, telecommunication, and media in the United States and abroad.

342 Basic Video Design and Production

Fall, Spring, Summer. 4(2-4) P:M: (TC 240) and (TC 201) R: Open only to students in the Department of Telecommunication. Approval of department; application required.

Conceptualization, design, planning, producing, directing, shooting, editing, and evaluation of video programs. Emphasis on multi-camera, live studio production. Introduction to location single-camera shooting and editing.

343 Basic Audio Production

Fall, Spring, Summer. 4(2-4) P:M: (TC 201 and TC 240) R: Open only to students in the Department of Telecommunication. Approval of department; application required.

Basic audio production techniques. In-depth audio and radio industry analysis. Media writing.

346 Basic Interactive Media Design

Fall. 4(2-4) P:M: (TC 201) and (TC 240) R: Approval of department, application required.

Basic design and development of interactive digital media, particularly related to Internet applications.

352 Broadcast and Cable Programming and Audience Promotion

Spring of even years. 3(3-0) RB: (TC 200 and TC 240) R: Not open to freshmen or sophomores.

Evaluation, selection and scheduling of cable and broadcast programming. Audience promotion strategies and techniques.

361 Data Communication

Fall, Spring. 3(3-0) P:M: (TC 200 and TC 201) and (MTH 103 and MTH 114) or (MTH 116 or MTH 132) RB: (TC 310)

Data communication concepts and applications. Basic data communications protocols and local area network approaches. Fundamentals of databases.

375 New Media, Old Media

Fall. 3(3-0) P:M: (TC 100) RB: or approval of department.

Uses and social effects of the Internet and the other New Media of communication. Conventional theories of mass media and emerging theories of interactive media processes and effects. Critical examination of empirical social science research concerning the role played by the media, old and new, in society.

391 Special Topics in Telecommunication

Fall, Spring. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Approval of department.

Contemporary issues in telecommunication.

410 Advanced Telecommunication Policy

Spring of even years. 3(3-0) P:M: (TC 310) RB: (TC 100 and TC 200 and TC 201)

Information and communication industries policy in the network of networks of the information society.

442 Advanced Video Design and Production (W)

Fall, Spring, Summer. 4(2-4) P:M: (TC 342 and TC 343) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of Telecommunication. Approval of department; application required.

Advanced principles of video production. Techniques of design, recording, editing and writing.

443 Audio Industry Design and Management (W)

Fall, Spring. 4(2-4) P:M: (TC 342 and TC 343) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of Telecommunication. Approval of department; application required.

Advanced audio production specializing in multichannel techniques. Industry focus on all aspects of the audio field.

444 Information Technology Project Management

Spring. 3(3-0) Interdepartmental with Information Technology Management; Computer Science and Engineering. Administered by The Eli Broad College of Business. P:M: (ITM 311) R: Open only to seniors in the Specialization in Information Technology.

Practical training and experiences in design, testing, and launch of new information technologies and systems.