SACRAMENTO STATE

# Course Change Proposal
# Form A


| Academic Group (*College*): | Academic Organization (*Department*): | Date: |
|---|---|---|
| **College of Arts and Letters** | **Art** | **8/26/07** |
| **Type of Course Proposal:**<br>**New X Change ___ Deletion ___** | **Department Chair:**<br>**Dr Daniel Frye** | **Submitted by:**<br>**Rachel Clarke** |
| **Does this course fulfill a requirement for single-subject or multiple subject credential students? No __X** | **For Catalog Copy: Yes _X**<br>**CCE (*Extension*): None** | **Semester Effective:**<br>**Fall _X_ Spring ___, 2008** |

| **This course replaces experimental course Subject Area** *(prefix)* **and Catalog Nbr** *(course number)*: | |
|---|---|

**Change from:**

| Subject Area *(prefix)* & Catalog Nbr *(course no.)*: | Title: | Units: |
|---|---|---|
| | | |

**Change to:**

| Subject Area *(prefix)* & Catalog Nbr *(course no.)*: | Title: | Units: |
|---|---|---|
| ART 144 | **Art 144: Vector and Raster Imaging** | **3** |

**JUSTIFICATION:**

Digital imaging has two fundamental components: raster-based imaging (as seen in the ubiquitous Photoshop) and vector-based imaging, tied to geometry and aimed at organizing visual images into re-scaleable objects composed of lines, arcs and fills for a bold visual effect. A course that deals with understanding and integrating these two areas is necessary. In creating a digital imaging class beyond the beginning level, the course acts as a complement to the existing offerings in Electronic Art, focusing on developing refined skills through the artistic application of digital processes, and exploring their integration into contemporary printmaking. Combining digital processes and printmaking materials, students are able to expand both their technical and artistic vocabulary.

**NEW COURSE DESCRIPTION: (Not to exceed 80 words, and language should conform to catalog copy.** See http://www.csus.edu/acaf/univmanual/crspsl.htm - Guidelines for Catalog Course Description

Through traditional and non-traditional print media, this course explores two fundamentals of digital imaging: Vector and Raster processes. Vector graphics use geometry: points, lines and fills, creating crisp re-scaleable images. Raster graphics use a rectangular grid of pixels to create continuous-tone effects. Exploring these approaches to making and printing images, students gain a deeper understanding and more tactile awareness of image making and contemporary issues in art. (3 units) Lab fee course / May be taken twice for credit.

**Note:**

**Prerequisite: Art 97, or equivalent**
**Enforced at Registration: No X**

**Corequisite:**
**Enforced at Registration: None**

**CAN (California Articulation Number): N/A**

| **Graded: Letter X Credit/No Credit____** | **Instructor Approval Required? Yes___ No X** |
|---|---|
| **Course Classification** *(e.g., lecture, lab, seminar, discussion)*:<br>**C7** | **Title for CMS (not more than 30 characters)**<br>**Vector and Raster Imaging** |

| **Cross Listed?**<br>**No X** | **If yes, do they meet together and fulfill the same requirement, and what is the other course.** |
|---|---|

**How Many Times Can This Course be Taken for Credit? 2**

**Can the course be taken for Credit more than once during the same term? No X**

## FOR NEW COURSE PROPOSALS OR SUBSTANTIVE CHANGES ONLY:

**Description of the Expected Learning Outcomes:** Describe outcomes using the following format: "Students will be able to: 1), 2), etc." See the example at http://www.csus.edu/acaf/example.htm

Students will be able to:

1) Extend their ability to work with digital imaging techniques.
2) Experience the tactile characteristics of various print media.
3) Extend their ability to combine and integrate digital and non-digital processes and techniques.
4) Use inkjet printing and laser printing, including nuanced understanding of color systems, and understand differences between commercial and fine art applications.
5) Increase ability to work independently on self-generated projects.

**Attach a list of the required/recommended course readings and activities [Note: it is understood that these are updated and modified as needed by the instructor(s).] This attachment should be forwarded only to your Dean's office, not Academic Affairs.

**Assessment Strategies:** A description of the assessment strategies (e.g., portfolios, examinations, performances, pre-and post-tests, conferences with students, student papers) which will be used by the instructor to determine the extent to which students have achieved the learning outcomes noted above:

Portfolio (50%)
Software Exercises (20%)
Mid-term quiz (10%)
Contribution to class (20%): effective participation in critiques, attendance on field trip, evidence of assisting fellow students, working independently and overall contribution to the class working environment

For whom is this course being developed?
Majors in the Dept X  Majors of other Depts X  Minors in the Dept X  General Education ___  Other ___
Is this course required in a degree program (major, minor, graduate degree, certificate? Yes __ No X
If yes, identify program(s): N/A

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer facilities, faculty, etc.)? Yes ___ No X
If yes, attach a description of resources needed and verify that resources are available.

Indicate which department or programs will be affected by the proposed course (if any). Art Department: Printmaking and Electronic Art areas

***The Department Chair's signature below indicates that affected programs have been sent a copy of this proposal form.***

**Approvals:** If proposed change, new course or deletion is approved, sign and date below. If not approved, forward without signing to the next reviewing authority, and attach an explanatory memorandum to the original copy.

| Signatures: | Date |
|---|---|
| **Department Chair:** | 9/14/07 |
| **College Dean or Associate Dean:** | 11-1-07 |
| **CPSP** *(for school personnel courses ONLY)* | |
| **Associate Vice President and Dean for Academic Programs** | |

**Distribution: Academic Affairs (original), Department Chair and College Dean. Dean's office to send original after approval to Academic Affairs, at mail zip 6016. An electronic copy must also be sent.**

# College of Arts and Letters Curriculum Committee
# CHECK-OFF LIST FOR COURSE APPROVAL

Name of Department ____Art___ Effective Date __Fall 2008

Proposed Course Number: 144

Course Name: (Series title) Vector and Raster Imaging

Contact Person: Rachel Clarke_ Instructor: Associate Professor, Electronic Art

Projected Enrollment: 21_ Units of Credit: 3

Has the course been offered before? __No If yes, under what number?

Suggested Course Classification: C7 Unit distribution: lecture ____ lab____ activity:X

**List the prerequisite(s) for the proposed course.**
**Art 97, or equivalent experience evidenced in portfolio**

**For which students or programs is the course designated?**
__X_ Majors in the department
__X_ Minors in the department
___ Majors of other departments *Computer Science Majors in Computer Graphics and Game Design*
___ General service
___ Other (specify) _____

**If approved by the A & L Curriculum Committee, will this course be submitted for consideration in the General Education Program?** ____ Yes __X__ No

**Method of Presentation:**
___ Lecture ___ Lecture/Activity ___ Lecture/Discussion ___ Lecture/Laboratory
__X_ Activity ___ Laboratory ___ Seminar ___ Films and/or other visuals
___ Performance ___ Other (specify) _____

**If different amounts of credit will be available for the proposed course, indicate differences in course requirements for earning the units. N/A**

**If the course can be taken more than one time for credit, what is the justification for the repetition? How will the two (or more) experiences differ?**

The course can be taken twice for credit
The course allows for expansive creative exploration and portfolio development. Students can continue to expand their technical proficiency, refine skills and further develop their visual vocabulary by repeating the course.

**What courses currently offered in Arts and Letters or other colleges/departments most closely resemble the proposed course?** Please *list* these other courses and justify why the proposed course will not duplicate them. Not all approved courses are shown in the current catalog so please consult

faculty/chair in other schools/departments where duplication might occur. Please list persons you consulted.

The proposed course will not duplicate an existing course. It expands on the offerings in the Art major/minor in both the Electronic Art and Printmaking area, by adding a new dimension of integration between these two curriculum areas.

**Can the course be implemented within the existing departmental allocation? _Yes____**

If the proposed course will require an expenditure of $100 or more, append a breakdown of expenditure and source of funding.

**If this is a new course, how will it be integrated into your present allocation:**

1. Will you be giving up another course to make room for the proposed course?

Yes

2. What course(s) could you alternate in the schedule with the proposed course?

Rachel Clarke (Art Department Electronic Art faculty) would teach this courses once every three or four semesters. Rachel Clarke would alternate it with one of the following: 142, 197 198

John Driesbach (Art Department Printmaking faculty) would teach the course once every three or four semesters. John Driesbach would alternate it with 145

3. How often would you schedule the proposed course?

Once every two or three semesters either RC or JD could teach the course instead of one of their other courses. Therefore course may be offered once every year (at most)

4. What full-time faculty can teach the course? What other course would they give up in order to teach it?

Rachel Clarke

John Driesbach

5. Realistically, what fiscal impact might the proposed course have? *(e.g., operating expense, faculty cost, staff cost, student assistants, equipment, etc.)*

No additional equipment needed in the computer lab or printmaking studio.
RC will apply for a student Lab Fee to cover printing and materials costs.

**List the objectives/goals/expected learning outcomes.**

Students will be able to:

1) Extend their ability to work with digital imaging techniques.
2) Experience the tactile characteristics of various print media.

3) Extend their ability to combine and integrate digital and non-digital processes and techniques.
4) Use inkjet printing and laser printing, including nuanced understanding of color systems, and understand differences between commercial and fine art applications.
5) Increase ability to work independently on self-generated projects.

**What student assessment tools will be used?** *(e.g., exams, papers, portfolios.)*

1) Portfolio (50%)
2) Software Exercises (20%)
3) Mid-term quiz (10%)
4) Contribution to class (20%): effective participation in critiques, attendance on field trip, evidence of assisting fellow students, working independently and overall contribution to the class working environment

---

# Syllabus

## Art 144: **Raster and Vector Imaging**

| **Course details:** | **Contact details:** |
|---|---|
| Professor: Rachel Clarke<br>Semester: Fall 2008<br>Days: Tuesday and Thursday<br>Time: 9.00 - 11.50am<br>Location: Mariposa Hall, RM 1007 and Printmaking studio | Email: rclarke@csus.edu<br>Please use email rather than voicemail<br>Phone: 278 - 6316 (voicemail)<br>Office Hours: Tues and Thurs 7.30am – 9:00am<br>Office Location: Kadema 192 or Mariposa 1007<br>Websites<br>Teaching:<br>http://classes.asn.csus.edu/art.html<br>Art: http://www.rachelclarke.net |

## Course Description

Through use of traditional and non-traditional print media, this course explores two fundamentals of digital imaging: Vector and Raster processes. Vector graphics use geometry: points, lines and fills etc. to create crisp images regardless of scale. Raster graphics use a rectangular grid of pixels to create continuous-tone effects. Working with both approaches to printing, students gain a deeper understanding and more tactile awareness of image making and contemporary issues in art.
(3 units) Lab fee course / May be taken twice for credit.

### Topics include:

- Definition of and uses of vector graphics in creative work
- Definition of and uses of raster graphics in creative work
- Digital printing processes: commercial, non-commercial, technical considerations, etc.
- Non-digital printing processes
- Contemporary print media

Students will be required to commit AT LEAST the equivalent of class time to homework projects.

Students repeating Art 144 are expected to extend their exploration of media into more ambitious work in media they have already experienced, or through introduction of new media such as additional digital techniques, intaglio, lithography, silkscreen, or relief. In addition to traditional media, students may explore related output hardware available for the making of multiples. 3D computer modeling and commercial prototype production technologies may be incorporated in to this class. Participation in class is required, but student responsibilities may shift toward more advanced preparation early in the semester during coverage of areas well mastered by the repeating student.

**Objectives:**

Students will be able to:

- Extend their ability to work with digital imaging techniques.
- Experience the tactile characteristics of various print media.
- Extend their ability to combine and integrate digital and non-digital processes and techniques.
- Use inkjet printing and laser printing, including nuanced understanding of color systems, and understand differences between commercial and fine art applications.
- Increase ability to work independently on self-generated projects.

**Student Responsibilities:**

- Complete creative projects as assigned.
- Complete software exercises as assigned.
- Follow a structured process in project development.
- Completion of a portfolio of print media works.
- Completion of all projects, quizzes, homework and tutorial exercises meeting specified deadlines and criteria.
- Active participation in class critiques and discussions.
- Full attendance or official notification of absence is mandatory. More than three unauthorized absences will result in a 1/2 letter drop, more than six will result in a full letter drop, etc. Each time a student is late or leaves class early is equivalent to 1/4 of a full absence on the roll.

**Computer Room Information:**

- Mariposa 1007 is a MAC lab running OSX operating system. Students create an account at the beginning of class, and will log into their account in each class session.
- Supervised open lab times: in rooms 1003, 1005, 1007, 1009, consult the schedule outside the classroom. You can often use the computers when there is no class being taught in that room.
- Report computer problems to the lab technician on duty.
- The lab will not be open during major holidays when the campus is closed.

## Printing

- Students have full access to the black and white laserjet printer. Students will need to use their one-card when making prints.
- Color printing will only be permitted during class time, and for specific projects and assignments.

**Lab Rules**

- All electronic gadgets: cell phones, pagers, etc must be turned off while students are in the lab.
- Headphones are not permitted for personal music listening during class time.
- Browsing, surfing and exploring the net are only permitted when stated by the professor. Students may check the asn website for course details, but personal email and web surfing are not permitted during class time.
- No drinks and food anywhere near the computers. Students are permitted to place a beverage on the table at the far corner of the classroom.
- Tidy up trash, respect the lab and be considerate to fellow class members and lab users.

**Materials:**

- Storage media: USB key (recommended) / external hard drive / rewritable CDs (CD-RW) as preferred by student
- Sharpie or other indelible marker for labeling CDs/USB keys etc
- Hardback or spiral-bound dedicated sketchbook: for taking notes, making sketches and development of projects.

**Required Texts:**
**Manual:**
*Mastering Digital Printing* (Paperback)
Harald Johnson (Author)
Publisher: Course Technology PTR; 1 edition (December 2, 2002)
ISBN-10: 1929685653
ISBN-13: 978-1929685653

**Other Resources:**
*Illustrator CS2 for Windows & Macintosh (Visual QuickStart Guide)* Publisher: Peachpit Press (September 20, 2005)
ISBN-10: 0321336569, ISBN-13: 978-0321336569, by Elaine Weinmann (Author), Peter Lourekas
*Color Management for Photographers*, Andrew Rodney, Focal Press
*Coming into Focus*, John Barnier, Chronicle Books
*Contemporary Print Processes*, Keith Howard, Write Cross press
*Printmaking: A Primary Means of Expression*, (E. C.) Cunningham, Univ. of Colorado Press

**Samples of work:**
Special Collections:
Jean Charlot...Picture Book
John Driesbach portfolio Veggie Table prints
Silkscreen posters in Special Collections
Southern Graphic Council: http://www.sgcarchives.org/

## Schedule

**Week One:**
Review of introductory material and survey of student skills. File saving, definition of raster and vector, placement and linkage of images. Survey of print knowledge. Tour of print and computer labs. Students with experience in silkscreen, lithography, non-silver photography, or etching will be teamed with others to formulate initial projects.

**Week Two:**
Students work in the computer lab, generating digital imagery (vector based) Demonstrations of inkjet transparency making for silkscreen (positive) and lithography (negative.) Initial development of imagery involving alignment of forms (registration) and contrasting values.
Contemporary issues: Photo-montage and digital imagery resources (online and on paper)

**Week Three:**
Begin working with single color digital imagery on film matrix. Historic examples of work using halftone imagery: John Heartfield, Richard Hamilton, Andy Warhol, Robert Rauschenberg, Edwardo Paolozzzi, Wallace Berman, Kiki Smith. Students may use laser transfers and other direct means of printing.

**Week Four: Field trip**: Introduction to image setters. HalPrints and other firms in Sacramento convert digital imagery to printable form. We may visit direct to plate printers for comparison.