CGS Agenda Item 16-36
Effective Fall 2016

Eastern Illinois University
Revised Course Proposal
AET 4953, Color Management Technologies

Banner/Catalog Information (Coversheet)

1. **____New Course or X Revision of Existing Course**
2. **Course prefix and number:** *AET 4953*
3. **Short title:** *Color Management Technologies*
4. **Long title:** *Color Management Technologies*
5. **Hours per week: 2** Class **2** Lab **3** Credit
6. **Terms:** ___Fall ___Spring ___Summer **X** On demand
7. **Initial term**: **X** Fall ___ Spring ___ Summer Year: **2016**
8. **Catalog course description:** *Application of color theories, digital color reproduction, and quality control processes as they apply to color in specialty printing, textiles, web, video, and photography.*
9. **Course attributes: N/A**

   General education component: _____

   ___ Cultural diversity ___ Honors ___ Writing centered ___ Writing intensive ___Writing active
10. **Instructional delivery**
    Type of Course:

    ___ Lecture ___ Lab **X** Lecture/lab combined ___ Independent study/research

    ___ Internship ___ Performance ___ Practicum/clinical ___ Other, specify: _____

    Mode(s) of Delivery:

    X Face to Face ___Online ___ Study Abroad

    X Hybrid, specify approximate amount of on-line and face-to-face instruction *2-50 minute sessions online, 2- 50 minute sessions face-to-face per week*
11. Course(s) to be deleted from the catalog once this course is approved. *NONE*
12. **Equivalent course(s):** *NONE*

    a. Are students allowed to take equivalent course(s) for credit? ___ Yes ___No
13. **Prerequisite(s):** *AET 1363 or permission of instructor*

    a. Can prerequisite be taken concurrently? X Yes ___No

    b. Minimum grade required for the prerequisite course(s)? C

    c. Use Banner coding to enforce prerequisite course(s)? X Yes ___ No

d. Who may waive prerequisite(s)?

___ No one ___ Chair **X** Instructor ___ Advisor ___ Other (specify)

14. Co-requisite(s): ***N/A*** _____

15. Enrollment restrictions

a. Degrees, colleges, majors, levels, classes which may take the course: All

b. Degrees, colleges, majors, levels, classes which may not take the course: ***N/A*** _____

16. Repeat status: **X** May not be repeated ___ May be repeated once with credit

17. Enter the limit, if any, on hours which may be applied to a major or minor: 3

18. Grading methods: **X** Standard ___ CR/NC __ Audit ___ ABC/NC

19. Special grading provisions:

___ Grade for course will not count in a student's grade point average.

___ Grade for course will not count in hours toward graduation.

___ Grade for course will be removed from GPA if student already has credit for or is registered in: _____

___ Credit hours for course will be removed from student's hours toward graduation if student already has credit for or is registered in: _____

20. Additional costs to students:
Supplemental Materials or Software **None**

Course Fee ___ No **X** Yes, Explain if yes *A $75 course fee is required for this course. This fee covers consumables the students will use such as paper, ink t-shirts, ceramics, metals, and screen printing supplies. A $25 field trip fee is also required for this course. This fee will cover trips to production facilities and/or industry trade shows.*

21. Community college transfer:

___A community college course may be judged equivalent.

X A community college may not be judged equivalent.

Note: Upper division credit (3000+) will not be granted for a community college course, even if the content is judged to be equivalent.

Rationale, Justifications, and Assurances (Part I)

1. ___Course is required for the major(s) of _____

   X Course is required for the minor(s) of **Print & Textile Design**

   ___Course is required for the certificate program(s) of _____

   X Course is used as an elective

2. **Rationale for proposal** : *This course is being revised to serve two purposes. 1: Learners engaged in course activities are in need of a flexible offering format to permit enrollment in this course. Therefore, offering a hybrid option opens up the opportunity for students to enroll in this course in a manner more convenient for them. 2: Other equivalent institutions (Illinois State, Western Illinois) are considering offering a similar course in this format. This makes such a course necessary to compete with other universities.*

3. **Justifications for (answer N/A if not applicable)**

   Similarity to other courses: **N/A**

   Prerequisites: *A foundation in development of graphics for various applications is strongly recommended as well as experience in publishing graphics. AET 1363 provides the needed foundation in graphics creation and production that will help contribute to the success of students in this course.*

   Co-requisites: **N/A**

   Enrollment restrictions: **N/A**

   Writing active, intensive, centered: **N/A**

4. **General education assurances (answer N/A if not applicable)**

   General education component: **N/A**

   Curriculum: **N/A**

   Instruction: **N/A**

   Assessment: **N/A**

5. **Online/Hybrid delivery justification & assurances (answer N/A if not applicable)**

   Online or hybrid delivery justification: *Many software companies have made their software tools more readily accessible for students. The Internet connection speed for many users has increased thereby allowing for higher quality rich media instruction to be delivered. Finally, the course management tools that the university now uses allows there to be a richer interaction between students and faculty. To accommodate this situation, many of the given activities may be completed in a hybrid format. All faculty who will deliver this course online are/will be OCDI (or appropriate equivalent) trained.*

Instruction: *Instructional techniques may include flipped classroom strategies, peer learning, video based lecture, instructor based demonstration, and/or textbook tutorials. In flipped classroom instruction, the instructor will ask students to read on a particular topic and then complete a short assignment in advance of the material being presented. The students will also engage in a short discussion regarding the topics being presented. Certain elements of the course may require the students to teach one another a concept via video, screencast or podcasting. For these assignments, students will work in small groups to present each other material, work through the concepts, and complete assignments related to the topic. Video based lecture may be used present certain topics from the instructor. In these videos, the instructor will introduce material, complete demonstrations, and show examples of material to be learned. To supplement the videos, the instructor will create tutorials on how to apply and utilize certain tools and techniques or ask students to complete textbook tutorials.*

Integrity: *Assignments and/or papers will require that students submit work to a dropbox in the course management system where it will be checked for plagiarism. Assignments will be designed to where students will also have to draw on experiences, case studies, and/or develop solutions to problems that would be difficult to replicate from classmates. Projects will be applied and design based. Therefore the projects will rely upon the students developing and creating new designs of Websites unique to a particular client or customer and therefore difficult to replicate. Presentations of work will require students to complete a screencast and/or computer based presentation where the student will present the results of their work to their classmates. Students involved in peer review of classmates projects and presentations will be required to give feedback via discussion boards or synchronous chat rooms. All assignments, papers, projects, presentations, and critiques will be assigned a rubric that students must review and adhere to. All rubrics will be given to students on the first day of class. Finally, exams and quizzes will be administered through the course management system. Exams and quizzes will validate that students have retained knowledge from all instructional activities. Graduate students will be required to complete a research paper on a current topic in the realm of emerging color management technologies. This paper must go into depth on the issues and trends facing the topic, propose solutions and alternatives, and review practical case studies of implementation of these solutions. The resulting research paper must be submitted to a journal or academic conference for dissemination.*

Interaction: *This course will rely upon email, discussion boards, chat rooms, and remote assistance tools. The instructor will frequently respond to emails to address any concerns that students might have and send out messages to remind students of important due dates and address any other issues students may have. Discussion boards will be used as areas to discuss the topics of the week asynchronously. Students will be required to complete discussions with the whole class and/or small groups. Forums may also be set up for students to share issues or work collaboratively to solve problems on lab assignments. Chat rooms will be encouraged for both instructor to student interaction as well as student to student interaction synchronously. In the chat room, students may ask questions, give answers, and share information. Remote assistance tools will be relied upon heavily for this course. Issues that students may be unable to solve on their own may require a digital helping hand. Remote assistance software will be used to demonstrate to students synchronously or help to solve issues.*

Model Syllabus (Part II)

Please include the following information:

1. Course number and title

AET 4953 Color Management Technologies

2. Catalog description

Application of color theories, digital color reproduction, and quality control processes as they apply to color in specialty printing, textiles, web, video, and photography.

3. Learning objectives.

1) Explain the concepts and processes of color management. (WCR 1-7) (Grad 1-4)
2) Evaluate the capabilities and limitations of technologies used in various types of digital color management applications. WCR 1-7) (Grad 1-4)
3) Demonstrate and compare different color models including the proper measurement, evaluation and specification of color using quality control instruments. (CT 2, 3, 4) (Grad 1-2)
4) Implement color management procedures by printing digital designs on textiles, paper, and other substrates. (CT 2, 3, 4) (Grad 1-2)
5) Compare the color differences among dyes, pigments, textiles, papers and other substrates. (CT 2, 3, 4) (Grad 1-2)
6) Profile and control color in photography, video, and digital display applications. (CT 2, 3, 4) (Grad 1-2)
7) Conduct research on a topic in color management. (CT 1-4) (Grad 1-4)
8) Present finished projects in a professional format to be critiqued by peers and professionals. (SL 1-7) (Grad 1-4)

9) Provide criticism and suggestions for improvement of color management systems. (CT 1-6) (Grad 1-3)

4. Course materials.

- One USB Drive – Minimum of 16 GB
- Access to a computer and reliable internet connection
- Adobe Creative Cloud Software (Photoshop, Illustrator, InDesign, Acrobat)
- Online journal articles and online software exercises as assigned by the instructor

5. Weekly outline of content.

Face-to-face

Week	Day 1 (50 minutes) *Face-to-face*	Lab work (50 minutes) *Face-to-face*	Day 2 (50 minutes) *Face-to-face*	Lab work (50 minutes) *Face-to-face*
Week 1	Color and Vision	Metamerism exercise	Color Reproduction	Color Reproduction exercises
Week 2	Color Correction	Color Correction exercises	Contrast Correction	Contrast Correction exercises
Week 3	Balance Correction	Balance Correction exercises	Sharpness Correction	Sharpness Correction exercises
Week 4	Believeable Colors	Believeable Colors exercises	Color Attributes & Specification	Color Attributes & Specification exercises
Week 5	Quantifying color difference	Quantifying color difference exercises	Measuring Instruments	Measuring Instruments exercises
Week 6	Color Management Principles	Color Management Principles exercises	Scanner Profiling	Scanner Profiling exercises
Week 7	Monitor Profiling	Monitor Profiling exercises	Projector Profiling	Projector Profiling exercises
Week 8	Digital Camera Profiling	Digital Camera Profiling exercises	**Midterm Exam**	Digital Camera Profiling exercises
Week 9	Tablet and Smartphone profiling	Tablet and Smartphone profiling exercises	Color Management In Adobe	Color Management In Adobe exercises
Week 10	Color Gamut Evaluation	Color Gamut Evaluation exercises	Color management workflow design	Color management workflow design exercises
Week 11	Color management in the cloud	Color management in the cloud exercises	Evaluating color systems	Evaluating color systems exercises
Week 12	Designing Research	Designing Research Digital Camera Profiling exercises	Color Statistics	Color Statistics exercises
Week 13	Presenting Research	Presenting Research Digital Camera Profiling exercises	Research	Research
Week 14	Research	Research	Research	Research
Week 15	Research	Research	Research	Research
Week 16	**Final Exam**			

Hybrid

Week	Day 1 (50 minutes) *Online*	Lab work (50 minutes) *Face-to-face*	Day 2 (50 minutes) *Online*	Lab work (50 minutes) *Face-to-face*
Week 1	Color and Vision	Metamerism exercise	Color Reproduction	Color Reproduction exercises
Week 2	Color Correction	Color Correction exercises	Contrast Correction	Contrast Correction exercises
Week 3	Balance Correction	Balance Correction exercises	Sharpness Correction	Sharpness Correction exercises

Week 4	Believeable Colors	Believeable Colors exercises	Color Attributes & Specification	Color Attributes & Specification exercises
Week 5	Quantifying color difference	Quantifying color difference exercises	Measuring Instruments	Measuring Instruments exercises
Week 6	Color Management Principles	Color Management Principles exercises	Scanner Profiling	Scanner Profiling exercises
Week 7	Monitor Profiling	Monitor Profiling exercises	Projector Profiling	Projector Profiling exercises
Week 8	Digital Camera Profiling	Digital Camera Profiling exercises	**Midterm Exam**	Digital Camera Profiling exercises
Week 9	Tablet and Smartphone profiling	Tablet and Smartphone profiling exercises	Color Management In Adobe	Color Management In Adobe exercises
Week 10	Color Gamut Evaluation	Color Gamut Evaluation exercises	Color management workflow design	Color management workflow design exercises
Week 11	Color management in the cloud	Color management in the cloud exercises	Evaluating color systems	Evaluating color systems exercises
Week 12	Designing Research	Designing Research Digital Camera Profiling exercises	Color Statistics	Color Statistics exercises
Week 13	Presenting Research	Presenting Research Digital Camera Profiling exercises	Research	Research
Week 14	Research	Research	Research	Research
Week 15	Research	Research	Research	Research
Week 16	**Final Exam**			

6. Assignments and evaluation, including weights for final course grade.

	Undergraduate	**Graduate**
Assignments (software/technique exercises)	15%	8%
Discussions	15%	14%
Quizzes	15%	14%
Applied Projects (research project)	20%	18%
Exams	25%	18%
Papers (journal article reviews)	10%	19%
Research Paper	-----	9%
TOTAL	**100%**	**100%**

7. Grading scale.

A = 90 to 100 %, B = 80 to 89%, C = 70 to 79%, D = 60 to 69%, F < 60%

8. Correlation of learning objectives to assignments and evaluation.

Objective	**Assignments** Undergraduate: 15% Graduate: 8%	**Discussions** Undergraduate: 15% Graduate: 14%	**Quizzes** Undergraduate: 15% Graduate: 14%	**Projects** Undergraduate: 20% Graduate: 18%	**Exams** Undergraduate: 25% Graduate: 18%	**Papers** Undergraduate: 10% Graduate: 19% Research paper: 9%
1) A	X	X	X		X	X
2) B	X	X	X		X	X
3) C	X	X	X			
4) D	X		X	X		
5) E	X		X	X		

6) F	X			X		
7) G	X			X		
8) H		X		X		X
9) I		X		X		X

Date approved by the department or school: 1/14/2016
Date approved by the college curriculum committee: 2/26/2016
Date approved by the Honors Council *(if this is an honors course):*
Date approved by CAA: 3/10/16 CGS: