New Course Request

Check Appropriate Boxes: Undergraduate credit [✓]  Graduate credit [☐]  Professional credit [☐]

1. School/Division: Informatics
2. Academic Subject Code: NEWM-N

3. Course Number: 102 (must be cleared with University Enrollment Services)
4. Instructor: Beth Lykins

5. Course Title: Raster and Vector Graphics

6. First time this course is to be offered (Semester/Year): Fall 2010

7. Credit Hours: Fixed at 3 or Variable from ________ to ________

8. Is this course to be graded S-F (only)? Yes [☐] No [✓]

9. Is variable title approval being requested? Yes [☐] No [✓]

10. Course description (not to exceed 50 words) for Bulletin publication: A hands-on introduction to the basic tools used in industry for the creation, editing, manipulation, and uses of 2D raster and vector graphics. Other topics include the integration of imagery into a personal Web site.

11. Lecture Contact Hours: Fixed at ________ or Variable from ________ to ________

12. Non-Lecture Contact Hours: Fixed at ________ or Variable from ________ to ________

13. Estimated enrollment: ________ of which ________ percent are expected to be graduate students.

14. Frequency of scheduling: F/S Will this course be required for majors? Required [☐]

15. Justification for new course: Redesign of New Media Curriculum

16. Are the necessary reading materials currently available in the appropriate library? Yes [☐] No [☐]

17. Please append a complete outline of the proposed course, and indicate instructor (if known), textbooks, and other materials.

18. If this course overlaps with existing courses, please explain with which courses it overlaps and whether this overlap is necessary, desirable, or unimportant.

19. A copy of every new course proposal must be submitted to departments, schools, or divisions in which there may be overlap of the new course with existing courses or areas of strong concern, with instructions that they send comments directly to the originating Curriculum Committee. Please append a list of departments, schools, or divisions thus consulted.

Submitted by: ____________________________ Date: 6/30/2009

Department Chairman/Division Director ____________________________ Date ____________________________

Dean of Graduate School (when required) ____________________________ Date ____________________________

Approved by: ____________________________ Date: 1/30/2009

Chancellor/Vice-President ____________________________ Date ____________________________

University Enrollment Services

After School/Division approval, forward the last copy (without attachments) to University Enrollment Services for initial processing, and the remaining four copies and attachments to the Campus Chancellor or Vice-President.

UPS 724 University Enrollment Services Final—White; Chancellor/Vice-President—Blue; School/Division—Yellow; Department/Division—Pink; University Enrollment Services Advance—White
N102: Raster and Vector Graphics

3 Credit Hours
Beth Lykins
School of Informatics, Media Arts and Science
http://oncourse.iu.edu

Instructor: Beth Lykins, M.S.
Office Address: IT 457
Office Phone: 317-278-7624
Office Hours: Mondays and Tuesdays 2-3, or by appointment (this may change when the actual semester starts)
Email Address: ealykins@upui.edu

Course Description:
A hands-on lab-based introduction to the basic tools used in industry for the creation, editing, manipulation, and uses of 2D raster and vector graphics. Other topics include the integration of imagery into a personal Web site.

Prerequisite: none

Required Text:
- Author: Yue-Ling Wong
- Title: Digital Media Primer: Digital Audio, Video, Imaging and Multimedia Programming
- Edition: 1st
- Publisher: Pearson Prentice Hall

Additional Texts: (still under review)

Equipment needed:
External storage media (external hard drive, cd’s or DVD’s, etc.) for use in labs and to transport projects, a minimum of 10 cd’s or dvd’s for handing in projects, a digital camera is highly recommended, access to a printer

Course Outcomes:
- Students will be introduced to the similarities and differences of working with files across the spectrum of digital media production methods through hands-on projects based on digital imaging concepts.
- Introductory level projects will emphasize some of the basic production methods used in media arts and science.
- Students will learn the fundamental differences between raster and vector imaging techniques and how to apply them to a variety of media arts applications through basic multimedia projects.
- Multimedia integration will be incorporated through simple projects that prepare students for further study in interactive media.
• Written essays will allow students to research areas of digital media production that are of interest and make connections between real world practices and in-class projects.

Core Competencies:
Through class presentations and weekly discussions/critique students will have an opportunity to share their projects with one another and have the opportunity to be involved in a peer critique environment. Students will learn to recognize the difference between analog and digital media production techniques as well as gain an introduction to best practices in some of the major areas of digital media production. The successful student will be able to understand and recognize fundamental elements of digital media production such as raster, vector, appropriate file types for various output methods, color models for various digital media production methods, frame rates, basic compression methods for various output methods, lossy vs. lossless compression, keyframes, tweening, etc.

Software used: Photoshop, Illustrator, and Flash

Course Expectations:

No files or homework will be accepted via e-mail for any reason. This policy will be enforced.

The difference in this course between assignments, exercises, and projects:

• **Exercises** are usually centered on software or analytical skills and are completely discussed and demoed in lecture/lab and usually do not have a formal assignment sheet. They are usually not documented in your books, other than the recommended software titles for the course. Even in that case, the books are meant to broaden your understanding of the ideas presented in lab but are not tutorials for the labs. The deliverables for exercises are usually due right away so I can check your mastery of skills needed to complete the assignments. While I do my best to monitor your progress on exercises it is your responsibility to let me know if you do not understand something. Please ask questions, even if you have to interrupt a demo to do so.

• **Assignments** are homework and will involve reading and possibly research, with defined deliverables outlined in a formal assignment sheet. Assignments usually will have a due date 1-2 weeks after they are assigned and are worth significantly more points that exercises. Assignments are intended to show me your comprehension of concepts and synthesis of ideas presented through readings and lectures, combined sometimes with skills learned to date.

• **Projects** are major assignments that pull together concepts and skills from assignments and exercises. These are worth the bulk of the points for this course and accurately demonstrate best practices in digital media, replicating or actually including real world experiences. Students will experience both individual and group projects in this course. Successful completion of projects comes from mastering exercises and assignments.

Assignments will be posted 1 week prior to the due date and are expected to be turned in via Oncourse, unless otherwise stated on the assignment sheet or communicated via other means by the instructor. Each assignment will give detailed due date and deliverable instructions. Assignments are due at the designated time on the designated date. No due date extensions will be given, unless at the instructor’s instigation; this includes extensions for absences.
Exercises are generally completed during demos or lecture (I pace it so you should be able to keep up, but if not, let me know) and expected to be completed immediately. They will not be posted on Oncourse prior to the demos in class and cannot be made up for credit if missed. In-class lab exercises are to be uploaded prior to leaving for that day; on-line lab exercises are due by the date listed in Oncourse. The idea for the online section is that you will watch the video and work along and then upload the files to Oncourse once you are finished. No due date extensions will be given, unless at the instructor’s discretion; this includes extensions for absences.

Projects will be posted to Oncourse 2 weeks before they are due and are also due at the designated time on the designated date. If I sense that more time is needed by the majority of the class I may exercise my right to extend a due date, but that is solely at my discretion. Please don’t ask for an extension unless you have extenuating circumstances.

Once an assignment/exercise/project folder in Oncourse is closed (AKA the due date has passed) it will NOT be reopened and the assignment or exercise cannot be handed in. Let me repeat – I will not accept ANY files via e-mail so if you missed the due date in Oncourse do NOT send the files to me. I will delete the message unopened and you will not receive credit for that assignment or exercise. Obviously I have had a major problem with this in the past, hence the emphasis...

If you want feedback on an assignment or exercise and you missed the due date, make an appointment to see me in my office and I will critique your work, but not for credit. At least that way you will learn from what you did right and what you did wrong so you can apply that knowledge to the remaining assignments/exercises. My best advice is just to get everything in on time to avoid this problem.

Extenuating circumstances can be discussed on an individual basis, but the final decision is up to the instructor in all cases and proof of the extenuating circumstance(s) will be required, such as a doctor’s note, obituary notice, police report, or other substantial proof. Abuse of the system by previous students is the reason for this requirement...

Check Oncourse regularly for assignment details and messages. This is my best, and sometimes only, way to reach you so it is your responsibility to check Oncourse daily.

There may be periodic exams and quizzes in this course. Not all quizzes will be announced prior to when they are given, so it is in your best interests to keep current with the reading assignments. All exams will be announced well in advance of being given and study sheets will be provided.

In the event that a student must miss an exam it is the student’s responsibility to contact the instructor to arrange for an alternative assignment that must be completed within 1 week of the missed exam. This assignment will carry the same weight and cover the same concepts as the exam that was missed, but it will not be the same as the exam.

Pop quizzes that are missed may not be made up.

Participation in discussion and critique is expected of all students. Critique is intended to be a place where we can explore the strengths and weakness of each other’s work. Any personal attacks or unsubstantiated criticism (or praise) of work will not be tolerated. Every project/assignment/exercise is subject to critique.
Extra credit options will be given throughout the semester and announced in class and posted on Oncourse.

Oncourse will be used extensively in this course and it is each student’s responsibility to monitor e-mail, announcements, forums, chats, resources, and assignments in Oncourse daily. Failure to do so is not an excuse for missing an important message or assignment.

In the event of inclement weather or any other unforeseen class disruption, an announcement will be posted on Oncourse no less than 3 hours prior to class if possible. In the event of a cancelled class, an on-line assignment will be posted in Oncourse with appropriate supplementary material. Online assignments in this situation hold the same weight as a regular assignment.

Attendance Policy:
University regulations state: “Students are expected to be present for every meeting of the classes in which they are enrolled.”

Regular and punctual attendance is vital to the success of any class; therefore attendance is mandatory. The assignments, lectures, and labs in this class are cumulative and regular and punctual attendance is crucial to your success. I do understand that life happens and it may be impossible to attend every class, therefore, I will permit each student to miss 3 in-class lectures, or 3 weekly online assignments, regardless of reason, without any disciplinary action. Any content missed will be the responsibility of the student, and lectures will not be repeated, other than being posted online and late work will not be accepted, per the Course Expectations stated above.

For students who meet in the classroom, if a student misses 4 in-class meetings, for any reason, the student will automatically fail the course.

For the online section, fulfillment of a weekly assignment replaces attendance. If 4 weekly online assignments are missed (and late work will not be accepted – see the Course Expectations section for details) the student will automatically fail the course.

If you want to get credit for attending class it is your responsibility to sign the attendance sheet if you attend the classroom section, or make sure your weekly assignment is submitted on time if you are taking this course online.

Date for each class meeting, lecture, lab, and assignment outline:

<table>
<thead>
<tr>
<th>Date</th>
<th>Assignment</th>
<th>Points</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Assign industry research paper/presentation – find someone in the industry and interview them and then write a reflection on it</td>
<td>Paper 100 points Presentation 100 points</td>
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</tbody>
</table>
| Week 2 | Analog vs. Digital | Assign raster and vector scavenger hunt **assignment** – Find at least one example of a raster image and at least one example of a vector and be ready to share them with the class for discussion.  
**Assign Reading # 2**  
*Lecture:* Digital imaging – intro to imaging – analog and raster | Assignment 25 points |
|---|---|---|---|
| Week 3 | Raster | Raster and vector scavenger hunt **due**  
Assign Photoshop **assignment** – Create a layered PS document and save it as a PSD  
*Lecture:* Raster concepts  
*Lab:* Photoshop **exercise:** tools and layers  
(\textit{due at the end of class}) | Assignment 25 points  
Exercise 10 points |
| Week 4 | | Photoshop layers assignment **due**  
Assign Photoshop **assignment** – Combine multiple images into one composite that tells a story  
*Lecture:* Visual storytelling, file types and industry standards  
*Lab:* Photoshop **exercise:** masks and compositing  
(\textit{due at the end of class}) | Assignment 25 points  
Exercise 10 points |
| Week 5 | | Photoshop composite assignment **due**  
Assign Photoshop **assignment** – Create a PSD with vector shapes and smart objects and save it for the web  
*Lecture:* Photoshop for the web and how to target an audience  
*Lab:* Photoshop **exercise:** vector tools and smart objects  
(\textit{due at the end of class}) | Assignment 25 points  
Exercise 10 points |
| Week 6 | Raster and Vector | | Photoshop vector assignment **due**  
**Assign Reading # 3**  
*Lecture:* Working with Raster and Vector together | Exercise 10 points |
<table>
<thead>
<tr>
<th>Week 7</th>
<th>Vector</th>
<th>Assign Illustrator assignment - Create an image with type on a path and with a shape filled with type</th>
<th>Assignment 25 points</th>
<th>Exercise 10 points</th>
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<tr>
<td></td>
<td></td>
<td><em>Lecture:</em> Vector concepts&lt;br&gt;<strong>Lab:</strong> Illustrator exercise: tools and Type in Illustrator (due at the end of class)</td>
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<td>Week 8</td>
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<td>Illustrator type assignment due&lt;br&gt;Assign Illustrator assignment – Find an interesting letter (any font) and trace it using the pen tool on a layer over the original character&lt;br&gt;<strong>Lecture:</strong> Illustrator is not like using a pencil, but then again, it is…&lt;br&gt;<strong>Lab:</strong> Illustrator exercise: Bezier curves, points, and more Type in Illustrator (due at the end of class)</td>
<td>Assignment 25 points</td>
<td>Exercise 10 points</td>
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<td>Week 9</td>
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<td>Illustrator Bezier assignment due&lt;br&gt;Assign Illustrator assignment – Apply gradient mesh to a complex shape you created in Illustrator (can trace an image like you did the letter)&lt;br&gt;<strong>Lecture:</strong> Raster effects in a vector world&lt;br&gt;<strong>Lab:</strong> Illustrator exercise – Gradient mesh (due at the end of class)</td>
<td>Assignment 25 points</td>
<td>Exercise 10 points</td>
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<td>Week 10</td>
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<td>Illustrator Gradient Mesh assignment due&lt;br&gt;Assign Web Ad project – Create an add for use on My Space&lt;br&gt;<strong>Lecture:</strong> Imaging for interactivity – PS or Illustrator, or both?&lt;br&gt;<strong>Lab:</strong> Open lab to work on web ad project</td>
<td>Project 150 points</td>
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<td>Week 11</td>
<td>Multimedia</td>
<td>Assign Flash scavenger hunt assignment – Find a Flash based website you like and be ready to share it with the class&lt;br&gt;<strong>Assign Reading # 5</strong>&lt;br&gt;<strong>Lecture:</strong> Multimedia concepts and Flash UI overview</td>
<td>Assignment 25 points</td>
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<td>Week 12</td>
<td>Web Ad project due</td>
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<td>Assignment: Create a simple text animation in Flash</td>
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<td>Lecture: Images and time; the user, embedding fonts</td>
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<td>Lab: Flash exercise -- keyframes and tweening (due at the end of class)</td>
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<td>Assignment 25 points</td>
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<td>Exercise 10 points</td>
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<tr>
<th>Week 13</th>
<th>Flash animation assignment due</th>
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<tr>
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<td>Assign Flash with Photoshop and Illustrator Project (final project) -- Present your projects from this semester using Flash</td>
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<td>Lecture: Importing images into Flash and creating shareable Flash projects</td>
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<td>Lab: Flash exercise -- assets and publishing (due at the end of class)</td>
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<td>Final Project 300 points</td>
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<td>Exercise 10 points</td>
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<th>Week 14</th>
<th>Summarize course</th>
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<tr>
<td>Lecture: Course summary and review</td>
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<tr>
<td>Lab: Open lab to work on web ad project</td>
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<td>Week 15</td>
<td>Presentations</td>
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<td></td>
<td>Flash project due</td>
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<td>Industry research paper due</td>
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<td>Individual industry research and final project presentations (oral)</td>
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**Grading Information:**

9 lab exercises (10 points each, 90 points total)
9 assignments (25 points each, 225 points total)
1 industry research paper (100 points)
1 industry research presentation (100 points)
1 web ad project (150 points)
1 final project (300 points)
Pop quizzes over readings (35 points total)
(1000 total points for the course)

Grading scale:

A+ = 98 – 100%
A = 94 – 97%
A- = 90 – 93%
B+ = 87 – 89%
B = 84 – 86%
B- = 80 – 83%
C+ = 77 - 79%
C  = 74 - 76%
C- = 70 - 73%
D+ = 67 - 69%
D  = 64 - 66%
D- = 60 - 63%
F  = 59%

Grades can be discussed, but the instructor has final say in all grading disputes. Math is not my strongest discipline so please always double-check my calculations. Any discrepancy will be rendered in the students' favor and no student will be penalized for a clerical error on the instructor's part.

Grades will be posted via Oncourse and comments will almost always accompany grades. If more comments are desired, please contact me for an individual appointment.

**Principles of Undergraduate Learning (PUL)** -- each class should be able to assess learning outcomes in the following areas:

- Oral presentation
- Writing skills
- Critical thinking
- Application of knowledge
- Intellectual depth, breadth, and adaptiveness
- Understanding of society and culture
- Values and ethics

**Lab equipment and usage**

Labs and lab computers are to be used for school purposes only. Only IUPUI Media Arts and Science students are permitted to use these labs.

There are digital cameras, tripods, video cameras, light kits, sound recorders, and other equipment that can be checked out by New Media students for use in projects. All equipment can be reserved through Geoffrey Coryell. Geoff's e-mail is. This equipment is offered on a first-come-first-served basis.

**Policy on Academic Dishonesty / Integrity**

All students in Media Arts and Science should aspire to high standards of academic honesty. This class encourages cooperation and the exchange of ideas. However, students are expected to do their own work.

**Policy regarding late work and make-up exams**

Late work will not be accepted, except at the instigation of the instructor. See the Course Expectations section for full details on work expectations.

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In the event that a student must miss an exam it is the student’s responsibility to contact the instructor to arrange for an alternative assignment that must be completed within 1 week of the missed exam. This assignment will carry the same weight and cover the same concepts as the exam that was missed, but it will not be the same as the exam.

Pop quizzes that are missed may not be made up.

**All students are responsible for reading the Code of Student Rights, Responsibilities and Conduct of IUPUI.**

“A student must not violate course rules as contained in a course syllabus, which are rationally related to the content of the course or to the enhancement of the learning process in the course.” [Code of Student Rights, Responsibilities, and Conduct, page 29]

**Policy on Plagiarism**

Plagiarism is the use of the work of others without properly crediting the actual source of the ideas, words, sentences, paragraphs, entire articles, audio, or images. Using other students’ work (with or without their permission) is still plagiarism if you don’t indicate who initially did the work. Plagiarism, a form of cheating, is a serious offense and will be severely punished. When an instructor suspects plagiarism, he/she will inform the student of the charge; the student has the right to respond to the allegations. Students whose work appears to be plagiarized may be asked to produce earlier drafts of the work. Students should, for this reason and as a protection in cases of lost documents, retain rough drafts, notes and other work products for 2-3 weeks after the end of each semester. The penalties for plagiarism include reprimands, being failed for a particular exam, paper, project, or the entire course, disciplinary probation, or dismissal. Faculty, after consulting with their chair, and/or the dean must notify students in writing of their decision.

Students have the right to appeal such decisions by submitting a petition. All students are responsible for reading the Code of Student Rights, Responsibilities, and Conduct of Indiana University Purdue University Indianapolis.

**Policy regarding children attending**

“Children are not permitted to attend class with parents, guardians, or childcare providers. This conduct has the effect of unreasonably interfering with an individual’s work or academic performance creating an offensive learning environment.”