

New Course Request

Indiana University

Indianapolis Campus

Check Appropriate Boxes: Undergraduate credit Graduate credit Professional credit

1. School/Division Informatics 2. Academic Subject Code NEWM-N
3. Course Number 284 (must be cleared with University Enrollment Services) 4. Instructor Susan Tennant
5. Course Title Building Physical Prototypes

Recommended Abbreviation (Optional) _____
(Limited to 32 Characters including spaces)

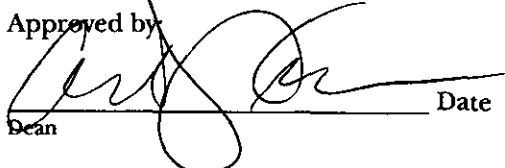
6. First time this course is to be offered (Semester/Year): Fall 2010
7. Credit Hours: Fixed at 3 or Variable from _____ to _____
8. Is this course to be graded S-F (only)? Yes _____ No
9. Is variable title approval being requested? Yes No
10. Course description (not to exceed 50 words) for Bulletin publication: An examination of concept formation for multimedia technology, including current, emerging, and future devices and displays. Learn to build physical and digital prototypes to facilitate idea development and presentation. Students research ideas, develop prototypes, evaluate, and present results.

11. Lecture Contact Hours: Fixed at 3 or Variable from _____ to _____
12. Non-Lecture Contact Hours: Fixed at 0 or Variable from _____ to _____
13. Estimated enrollment: 25 of which 0 percent are expected to be graduate students.
14. Frequency of scheduling: F/S Will this course be required for majors? _____
15. Justification for new course: Redesign of New Media Curriculum

16. Are the necessary reading materials currently available in the appropriate library? Yes
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:
M. Pauline Behr Date 6/30/2009
Department Chairman/Division Director

Date _____
Dean of Graduate School (when required)

Approved by:
 Date 1 July 2009
Dean

Date _____
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.

NEWM-284 Building Physical Prototypes -3 CR
Indiana University School of Informatics New Media, IUPUI
Instructor: Professor Susan Tennant
Office Address: ICT 459
Email: stennant@iupui.edu
Office Hours: Monday 3-5 PM or by appointment

Course Description:

An examination of concept formation for multimedia technology, including current, emerging, and future devices and displays. Learn to build physical and digital prototypes to facilitate idea development and presentation. Students research ideas, develop prototypes, evaluate, and present results.

Prerequisite:

None

Course Outcomes:

Through readings, discussions, field trips, assignments and activities, students will develop an insight into the principles of interaction design. Students should be able to demonstrate:

- Basic knowledge of development of an integrated simulation/demonstration prototype
- Understanding of the laws of interaction design
- Knowledge pertaining to the use of smart devices in public space
- Experience of advanced visualization laboratory

Core Communication and Quantitative Skills learned in this class:

- Express ideas and facts to others effectively in a variety of written formats;
- Comprehend, interpret, and analyze texts;
- Communicate orally in one-on-one and group settings;
- Solve problems that are quantitative in nature, and
- Make efficient use of information resources and technology for personal and professional needs.

By the end of the semester the student should have demonstrated their knowledge pertaining to the course information.

Required Textbook

Designing for interaction

Creating Smart Applications and Clever Devices

Author Dan Saffer

Publisher New Riders ISBN:0-3214306-1

Required Reading

Free online Text by Carolyn Snyder paper Prototyping: The fast and easy way to define and refine user interfaces Chapter 7 located on Books 24x7 at the IUPUI website

<http://www.iucat.iu.edu.proxy.ulib.iupui.edu/authenticate.cgi?status=start>

http://www.id-book.com/interactive_denim.htm

Equipment/Supplies

Equipment needed: (notebooks, disks, binders, etc.)

- Internet access
- External Hard drive for video and digital media
CD's for saving projects and handing in assignments
- One pocket folder for turning in printed assignments.
- Paper Pad.
- One lead pencil, Permanent black magic marker and large eraser
- Scissor, straight edge, utility knife
- Foam core or poster board
- Tape or other adhesive

Software used:

In this class we will work with Final Cut Pro, Adobe Illustrator, Adobe Photoshop, Flash and Microsoft word.

University Expectations/Guidelines/Policies:

University Regulations state: "Students are expected to be present for every meeting of the classes in which they are enrolled." Only the instructor can excuse a student from classes or course responsibilities. There are always legitimate reasons for missing class. Personal illness, accident, a death or serious illness in the immediate family, athletic trips, scheduled interviews, plant visits, and field trips, or other circumstances may make your class attendance impossible. Each of these situations will be evaluated on an individual basis. Students should make direct contact with his/her instructor preferably before a class. If the instructor cannot be reached in person, by e-mail, or by telephone, the student should leave a message in the instructor's department mailbox. Students can only make up work from an authorized absence and permission from the instructor.

Attendance and Participation

IUPUI policy is attendance is mandatory. I take attendance at the start of each class; so make sure to sign the attendance sheet. Any student missing FOUR classes without an approved excuse will receive ONE GRADE LEVEL reduction. For each additional absence your grade will drop an additional grade level. Please be on time to class. A sign-in sheet will be distributed during each class period; it is your responsibility to sign it. If you are consistently late to class, 15 minutes or more, you will receive ONE WARNING and then if you continue you will receive ONE GRADE LEVEL reduction. If you are unable to attend, please send me a notice through **ONCOURSE** before class. Absences may be excused with valid doctor's documentation or other extenuating circumstances. Students are expected to actively participate in class by asking questions and sharing any relevant experiences.

Snow or cancellation policy:

I will adhere to IUPUI's school policy of cancellation due to bad weather. If for some reason I cannot make it to school I will post a message on **ONCOURSE** so please check it before you leave for class.

Other Policies

Students will be expected at all times to maintain the university's standards of academic honesty and integrity. All students are responsible for reading the Code of Student Rights, Responsibilities and Conduct of IUPUI. Plagiarism will be considered to have occurred when a student presents as original, in either written or oral form, any idea that the student has acquired from an outside source. Because of the rapidly evolving nature of new media concepts, and the very wide range of cross-referenced possible sources, and to the extent that good ideas are often "in the air," so to speak, it is acknowledged that ideas may form independently in students' minds when clear sources or even nearly identical iterations of those ideas may be available in external sources. To that extent, and to

the extent that innovation in new media is often judged by the slightest variation, and to the extent the instructor does not wish to inhibit the often spontaneous processes by which ideas grow and flower in an individual's mind while the seed of that idea may be forgotten in the rush of development, plagiarism will be judged by degree and intent rather than a strict letter of the law. If it is determined, however, that plagiarism has occurred, it will be considered grounds for dismissal from class and other sanctions as stated in the Code of Student Rights, Responsibilities and Conduct of IUPUI. Work may be turned in any time prior to the due date. Work will be considered late if not turned in by the end of the class on the date expected.

Incompletes

The IUPUI Campus Bulletin presents the campus policy on incompletes, noting that a grade of incomplete **may** be assigned by an instructor when exceptional circumstances, such as illness, prevent students from finishing all works required in a course. The grade of I will be awarded only if the work is mostly complete, generally 75 to 80 percent, and of passing quality.

The key decision in deciding whether or not to give an incomplete involves assessing whether or not the student has completed, at a passing level, enough of the course and whether "exceptional circumstances" apply. Exceptional circumstances can include the serious illness of the student,

Note: that an incomplete is never warranted as a remedy for procrastination.

Academic Honesty

All students in New Media 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.

Plagiarism (adapted from the definition by the School of Liberal Arts)

Plagiarism is the use of the work of others without properly crediting the actual source of the ideas, words, sentences, paragraphs, entire articles, music or pictures. 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 papers, diskettes, retain rough drafts, notes and other work products for 2 or 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 the submitting a petition. All students are responsible for reading the Code of Student Rights, Responsibilities, and Conduct of Indiana University Purdue University Indianapolis.

Liability Warning

Your student ID and password are private! Under no circumstance are you to give them out to anyone. If another person uses your ID or password you will be held personally responsible for any and all activity on your computer account. If plagiarism is involved you run the risk of being dismissed from the school. If a computer or software is damaged you are responsible for repair and replacement. Loaning out your ID or password involves too much risk.

"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]

Communications

All class documents including assignments and syllabus are posted on ONCOURSE

You can also email or phone me at my office anytime with concerns, assistance outside about this class or other issues related to your life in the SOI at IUPUI. I'm a good listener.

Lectures and demonstrations

The class will be a lecture and lab format. Students will also be required to do some field visits to a public space such as a museum, park and cultural site-- thrown in to keep you interested. The textbook is required along with other reading or research assignment. It is up to the student to acquire any assignments and handouts. All assignments, readings, test/quizzes will be posted on ONCOURSE. If you miss a lecture, get notes from a classmate. **I don't do PowerPoint slides** (Only occasionally) and my notes are not posted on ONCOURSE. It is up to you to take notes. You can use your laptop.

Assignments

All assignments will be discussed during the class and posted on ONCOURSE with deadlines. These assignments will sometimes be executed in class but not always and you will need to work on your own time to complete the assignment. IUPUI requires each class credit to assign a minimum of three hours per credit hour to each class a student is taking. So in a three-credit class such as this one, you are required to conduct three hours per credit or 9 hours of time beyond the class time. The assignments are meant to be challenging not overwhelming. Follow Instructions on each assignment word document posted to ONCOURSE carefully. If you have questions about assignments please contact the Instructor as soon as possible. All assignments are to be handed in on time; it is up to you to meet this deadline. **Late work will not be accepted**, unless excused for medical or other reasons discussed with the instructor prior to the due date. You will receive a zero for any assignment not turned in, with NO EXCEPTIONS. Think of it this way, if I was your boss and you didn't do your work on time, you would most likely be fired. This is good preparation for life beyond SOI at IUPUI.

Class assignments will be given during scheduled class time but will require students to work on their own outside of class. At anytime a student may make an appointment and ask for assistance, advice or suggestions. All assignments and class handouts will be posted to ONCOURSE. **All exams, if given will be posted on ONCOURSE.** Students will be given ample time to complete each assignment. All your work will all be averaged into a final grade for the semester. Keep in mind that during critiques, participation in class discussions is always a factor in the grading scale.

Student Presentations and Assessment

Developing presentation skills is important for everyone, plus it's a good way to share information. Each student will have an opportunity to discuss and demonstrate their work in class and be given feedback by the instructor and classmates. Feedback is part of the class assessment process, a constructive method to give students a chance to review each other's work. This is not a reflection of you personally it's about the work you did for this class. Always maintain professionalism about yourself and your comments. REMEMBER: There are always areas for improvement. Do your best and your grade will reflect your class work effort.

I will give you comments on all assignments. These will be posted next to your grade on ONCOURSE. If you disagree with the grade it is your student right to address what you feel is the reason for a grade adjustment. I will discuss grades with students during a scheduled office visit. Please not in class.

Class Courtesy

- Come to class on time and be prepared.
- NEVER do homework or answer EMAIL in this class or you will be asked to leave. If you are typing, it should be the notes from my exciting lecturers.

- Turn off your cell phones and other noisy devices
- Pay attention to your classmates when they are presenting/ talking/ demonstrating.
- All students are responsible for reading the Code of Student Rights, Responsibilities, and Conduct of Indiana University Purdue University Indianapolis.
- Children are NEVER permitted to attend class with parents, guardians, or childcare providers.
- Food and drink unless with a cap is forbidden from classrooms.

Suggestions for Success in this Course

1. Attend all classes and come to class prepared and on time.
2. Read any necessary materials for the week prior to the lecture of the week.
3. Review reading assignments and participate in class discussions.
4. Always bring your textbook to class
5. Do not leave early unless excused by the instructor.
6. Execute all assignments to the best of your ability.
7. Hand in your assignments on time
8. Read and follow the directions of the assignments
9. Ask questions if you are unclear about anything.
10. ALWAYS CHECK YOUR ONCOURSE BEFORE COMING TO CLASS AND FOR ASSIGNMENTS, GRADES AND COMMUNICATIONS.
11. DO YOUR BEST.

Schedule of Class Topic and Textbook reading

| DATE | ACTIVITIES | ASSIGNMENTS | WHAT IS DUE |
|--|--|---|--|
| January | | | |
| <i>*Textbook: Designing for Interaction</i> | | | |
| 1/12 | Overview of class, syllabus/ Lecture/lab | Read chapter 1 | XXXXXXXXXXXX |
| 1/19 NO CLASS Martin Luther King Birthday | | | |
| 1/26 | Interaction Design Dan Saffer video Who are the key players in the field pre | Review chapter 1 | BRING TEXTBOOK Read Chapter 2 |
| February | | | |
| 2/2 | Case studies and their use in building prototype Preparing for the field trip. | Read chapter 3 | |
| 2/9 | <i>Field Trip</i> | Read chapter 4 | Topic Paper#1 Due |
| 2/16 | Paper prototype Laws of interaction design; What are smart agents? Define interactive design | IUPUI Library UCAT Text by Carolyn Snyder (free online) Paper Prototyping Books24x7 | Review of chapter 3 |
| 2/23 | Building an integrated media simulation/ demonstration for a | *Read chapters 6 &7 | Conceptual model for Prototype #1 |

| | | | |
|--------------|--------------------------------------|-----------------|--|
| | prototype, Software overview | | |
| March | | | |
| 3/2 | Developing the digital prototype | *Read chapter 8 | Review chapters 6&7 Paper Prototype #1 |
| 3/9 | Key people discussion | | Topic paper #2 |
| 3/16 | Spring break | | |
| 3/23 | STUDENT PRESENTATIONS | | Digital Prototype #1 |
| 3/30 | AVL field trip (if possible) | | |
| April | | | |
| 4/6 | Research and review of websites *Wii | | |
| 4/13 | Splines and Transmedia Interactions | *Read chapter 9 | Conceptual model for Prototype#2 |
| 4/20 | Future of interactive media--- | *Read epilogue | Paper Prototype #2 |
| 4/27 | *Working with the Wii Remote | | Review chapters 9 and epilogue |
| May | | | |
| 5/4 | STUDENT PRESENTATIONS | Last class | Digital Prototype #2 |

*Assignments, schedule and topics might vary slightly at the discretion of the Instructor)

***IMPORTANT** Field trips will be announced one week prior to the scheduled date of trip*

Assignments and Distribution of Grades:

- | | |
|------------------------------------|-------------|
| 1. Topics paper #1(Word document) | 5 pts |
| 2. Topics paper #2(Word document) | 5 pts |
| 3. Prototype #1 (Integrated media) | 35 pts |
| a. Conceptual model | 5 pts |
| b. Paper Prototype | 5pts |
| 4. Prototype #2 (Integrated media) | 35 pts |
| c. Conceptual model | 5 pts |
| 5. Paper Prototype | <u>5pts</u> |
| Total possible points | 100 pts |

*Prototype scenarios (pick two of the following)

1. Communication/Business
2. Education
3. Entertainment and gaming
4. Cultural life/community life
5. Health, medical and life science

***All grades and comments will be posted on ONCOURSE. All grades and comments will be posted on ONCOURSE within 2 weeks after due date**

Grades are based on points as indicated below:

| | | | |
|-------------|----|--------------|----|
| 94-100 Pts. | A | 67-69 Pts. | D+ |
| 90-93 Pts. | A- | 64-66 Pts. | D |
| 87-89 Pts. | B+ | 60-63 Pts. | D- |
| 84-86 Pts. | B | 59 and below | F |
| 80-83 Pts. | B- | Pts. | |
| 77-79 Pts. | C+ | | |
| 74-76 Pts. | C | | |