

**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 222 (must be cleared with University Enrollment Services) 4. Instructor Prof. Polly Baker  
5. Course Title ActionScript II

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: P: N221. Builds intermediate skills for designing and developing interactive multimedia applications for the Web, mobile devices, and the desktop. Topics include application design, using components, debugging, and documentation. Emphasis is on industry-standard products such as ActionScript, Flex, and AIR.

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 Baker Date 6/30/2009  
Department Chairman/Division Director

Approved by: \_\_\_\_\_ Date 1 July 2009  
Dean

\_\_\_\_\_  
Date \_\_\_\_\_  
Dean of Graduate School (when required)

\_\_\_\_\_  
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.

## Course Outline

**Course Number:** N222

**Course Title:** ActionScript II

**Credit:** 3 Hours

**Instructor:** Prof. Polly Baker, and others

**Office Address:** IT 400

**Office Phone:** 278-8150

**Office Hours:** TBA

**Email Address:** baker@iupui.edu

**Course Description:** Builds intermediate skills for designing and developing interactive multimedia applications for the Web, mobile devices, and the desktop. Topics include application design, using components, debugging, and documentation. Emphasis is on industry-standard products such as ActionScript, Flex, and AIR.

**Prerequisites:** N221

**Course Outcomes:** After completing this course, you should be able to:

- Design and build user interfaces using MXML tags, style sheets, and skins
- Design, implement, and debug application logic in ActionScript 3.0
- Dynamically retrieve and use media assets or information in an application
- Use XML as a language for modeling application information
- Use modular design concepts and techniques, build and use ActionScript classes
- Debug, profile, and document applications

**IUPUI PULs:** This course incorporates the IUPUI Principles of Undergraduate Learning, especially Critical Thinking. Building software tools involves analyzing requirements, evaluating alternative designs, and applying knowledge to create a good result, all elements of critical thinking. The course also involves Core Communication and Quantitative Skills, in that you will discuss your designs with other class participants.

### Recommended Texts:

Author: Keith Peters  
Title: ActionScript 3.0 Animation: Making Things Move  
Edition: Second (2007)  
Publisher: Friends of Ed  
ISBN: 978-1-59059-791-0

**Software:** This course uses Adobe FlexBuilder, Adobe Flash, and Adobe ActionScript, available in the Lab. Adobe Flash is available to students at <http://iuware.iu.edu>. Adobe also makes FlexBuilder

available to students at no cost. We will discuss how to acquire and install these packages on your laptop or home computer.

**Topic, by Week (tentative schedule)**

1. A review of ActionScript fundamentals
2. ActionScript Classes and Packages
3. Throwing, Bouncing, Colliding
4. Velocity, Gravity, Springs, Particles
5. Using Styles and Effects
6. Using the Debugger
7. Modeling information with XML, and parsing XML
8. MXML List and Data Controls
9. Data Binding
10. Security Considerations
11. External Assets, Dynamic Loading
12. Embedding Assets, Application Profiling
13. Adobe AIR: Building for the Desktop
14. Introducing embedded SQL
15. Deploying Applications
16. Comparisons with other approaches, tools, and frameworks

**Equipment:** You will need some form of portable storage, such as a USB thumb drive, for saving your work.

**Communication:** All class documents, including the syllabus and assignments, will be posted on OnCourse. Feel free to email me at any time with questions or concerns.

**Class Format:** Our time in the classroom will combine lecture, demonstration, discussion, and hands-on lab exercises.

**Reading Assignments:** The textbook is a good resource for additional explanation of many of the concepts covered in class. Additional class materials will be available through OnCourse.

**Homework:** All assignments will be discussed during class and posted on OnCourse. In some cases, we will use classroom time to get started on an assignment, but you will also need to work on your own outside of class time to complete some assignments.

**Workload:** Becoming proficient in anything requires an investment of time and effort. This class will include a number of homework assignments, designed to let you practice and experiment with the concepts we are learning. As you budget your time for the semester, you should anticipate spending several additional hours per week on this course.

**Due Dates:** Assignments are due at the beginning of class, unless specified otherwise. Late assignments will be accepted only in a 24-hour window past the assignment date, and only for half-credit. There are no exceptions.

**Grading:** Your performance in the course is measured by the points you accumulate on homework assignments, lab exercises and presentations, and quizzes, with weights as follows:

Lab activities:	40%
Homework assignments:	30%
Quizzes:	30%

Grades are based on points according to the following:

90 to 100 → A, 80 to 89 → B, 70 to 79 → C, 60 to 69 → D, 0 to 59 → F

**Attendance:** Attendance in class has been shown to contribute to academic success. At IUPUI, attendance in class is mandatory. I will be taking attendance in every class period.

**Class Courtesy:** Come to class on time and be prepared. Turn off your cell phone and other noisy devices. Don't do homework, answer email, or engage in conversation during class. Listen to your classmates when they are asking questions or presenting their work. Do not bring children with you to class.

**Plagiarism:**

Plagiarism is the use of the work of others without properly crediting the actual source of the ideas, words, sentences, paragraphs, articles, music, or pictures. Using other students' work (with or without their permission) is plagiarism if you don't indicate who did the work. Plagiarism is cheating. It is a serious offense and will be punished. If an instructor suspects plagiarism, the instructor will initiate a conversation with the student or students, who have the right to respond. Students might be asked to produce documentation, such as earlier drafts, notes, sketches, etc., that shows that the work is their own. The penalties for plagiarism include reprimands, a failing score for an exam or assignment or course, disciplinary probation, or dismissal from the University. Faculty must notify students of their decision in writing. Students have the right to appeal the decision by filing a petition for review of the case.

All students should read the IUPUI Code of Student Rights, Responsibilities, available at <http://www.iupui.edu/code> . This document describes your rights and responsibilities as an IUPUI student.