

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 322 (must be cleared with University Enrollment Services) 4. Instructor Prof. Mark Pfaff
5. Course Title Dynamic Data Applications

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: N222, CSCI-N342.
Examines the techniques used in multimedia applications to communicate with back-end
data and information services, and to create applications with run-time access to data,
information, and media assets.

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

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: N322

Course Title: Dynamic Data Applications

Credits: 3 hours

Instructor: Prof. Mark Pfaff, and others

Course Description: Examines the techniques used in multimedia applications to communicate with back-end data and information services, and to create applications with run-time access to data, information, and media assets.

Prerequisites: N222, CSCI N342

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

- Discuss the benefits and the challenges involved in dynamic data applications
- Analyze and explain differences between various approaches to back-end data
- Design, build, and evaluate a variety of dynamic data 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: TBD

Software: Adobe ActionScript, Adobe LiveCycleDS, Blaze, Zend

Topic, by Week (tentative schedule)

1. Dynamic Data Applications: An Overview
2. A review of XML
3. HTTP data services
4. An Overview of PHP, JSP, ColdFusion as application servers

5. Error Handling
6. Consuming and displaying data from HTTP services
7. Understanding XML-based Web Services
8. Consuming and displaying data from XML-based Web Services
9. Sending parameters to XML-based Web Services
10. Remote Objects
11. Examples of remote object frameworks, such as LiveCycle, Blaze, Zend
12. Connecting to remote object frameworks
13. Consuming and displaying data from remote object frameworks
14. Security Considerations. Collaboration applications.
15. The Bigger Picture: Comparison to other architectures
16. Looking Forward: What's on the Horizon?

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.