New Course Request

Indiana University

Check Appropriate Boxes: Undergraduate credit ☐ Graduate credit ☐ Professional credit ☐

1. School/Division Liberal Arts & Sciences
2. Academic Subject Code CSCT

3. Course Number A138 (must be cleared with University Enrollment Services)
4. Instructor D. Surmi & Others

5. Course Title Network Technologies and Systems Administration

Recommended Abbreviation (Optional) Network Tech. & Systems Adm.

(Limited to 32 characters including spaces)

6. First time this course is to be offered (Semester/Year): Spring 2005

7. Credit Hours: Fixed at 4 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: PtA150, Introduction to network principles and current network technology, both hardware and software. Network administration tools and techniques. Laboratory provides practical experience.

11. Lecture Contact Hours: Fixed at 3 or Variable from to

12. Non-Lecture Contact Hours: Fixed at 1 or Variable from to

13. Estimated enrollment: 20 of which 0 percent are expected to be graduate students.

14. Frequency of scheduling once a year. Will this course be required for majors? Yes ☐ No ☒

15. Justification for new course: To offer courses for non-majors and students enrolled in the Certificate in Computer Application

16. Are the necessary teaching 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: Honei Hakejo Date: 4/12/04

Department Chairman/Division Director

Approved by: L. Williams Date: 5/6/04

Chancellor/Vice-President

Dean of Graduate School (when required)

Lindale Chan, Comm. 6/24/04

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.

University Enrollment Services Final—White; Chancellor/Vice-President—Blue; School/Division—Yellow; Department/Division—Pink; University Enrollment Services Advance—White

UPS 724
Course Description:

A338 Network Technologies & Systems Administration (4 Cr.)
P: A150. Introduction to network principles and current network technology, both hardware and software. Network administration tools and techniques. Laboratory provides practical experience.

(course description adopted from http://www.cs.indiana.edu/Courses/descriptions/). CSCI A150 Introduction to Operating Systems is added as a prerequisite for this course.

Instructor:
Dave Surma and others

Possible Reference Books:

Possible Software:
- Windows, Linux Operating Systems, C++, shell programming

Course Objective:
The objective of this course is to provide an overview of Computer Networks and to introduce basic principles of network administration. "Hands-on" projects and assignments will introduce students to commonly used techniques in network administration and will demonstrate major topic areas within computer networks.

Topics: (as taught by Mr. Jeff Whitmer at IUB)
- What is a LAN, the OSI Model and the Physical Layer.
- The Physical and Data-Link Layers.
- The Data-Link Layer and Media Access Control Strategies.
- The Network and Transport Layers.
- The Transport and Session Layers.
- The Session Layer.
- TCP/IP.
- Wireless Networking.
- IPSec and VPN.
- VPN and Introduction to Network Design.
- Network Design.
- Directory Services.
- Windows XP, 2000, Linux.

Coursework:
- Several 'hands-on' programming assignments and projects illustrating concepts will be covered in class.