New Course Request

1. School/Division: School of Engineering and Technology
2. Academic Subject Code: CIT

3. Course Number: 301 (must be cleared with University Enrollment Services)
4. Instructor: 

5. Course Title: Digital Technologies for the Consumer
   Recommended Abbreviation (Optional): Digital Tech for Consumer
   (Limited to 32 Characters including spaces)

6. First time this course is to be offered (Semester/Year): Spring 2009

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

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

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

10. Course description (not to exceed 50 words) for Bulletin publication: P: Consent of Instructor.

   This course acquaints users with computer, digital, and telecommunications technologies
   necessary for personal and professional productivity. Students will learn the importance
   of protecting computers in cyberspace; how to apply security in homes and small
   businesses; and how to make cost-effective choices among hardware, software, and service
   alternatives in today's marketplace.

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

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

13. Estimated enrollment: 3 of which 0 percent are expected to be graduate students.

14. Frequency of scheduling: 1 per year [ ] Will this course be required for majors? No [ ]

15. Justification for new course: Part of CTAC 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:

Department Chairman/Division Director

Date: 5/3/08

Dean of Graduate School (when required)

Date

Approved by:

Dean

Date: 5/27/08

Chancellor/Vice-President

Date

University Enrollment Services

Date

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
DEPARTMENT: Computer and Information Technology  
EFFECTIVE SESSION: Spring 2009

**INSTRUCTIONS:** Please check the items below which describe the purpose of this request:

- [x] 1. New course with supporting documents
- 2. Add existing course offered at another campus
- 3. Expiration of a course
- 4. Change in course number
- 5. Change in course title
- 6. Change in course credit/type
- 7. Change in course attributes (department head signature only)
- 8. Change in instructional hours
- 9. Change in course description
- 10. Change in course requisites
- 11. Change in semesters offered (department head signature only)
- 12. Transfer from one department to another

**PROPOSED:**

<table>
<thead>
<tr>
<th>Subject Abbreviation: CIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Number: 501</td>
</tr>
<tr>
<td>Long Title: Digital Technologies for the Consumer</td>
</tr>
<tr>
<td>Short Title: Digital Tech Consumer</td>
</tr>
</tbody>
</table>

Abbreviated title will be entered by the Office of the Registrar if omitted. (22 CHARACTERS ONLY)

**EXISTING:**

<table>
<thead>
<tr>
<th>Subject Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Number</td>
</tr>
</tbody>
</table>

**TERMS OFFERED:**

- [x] Summer
- [x] Fall
- [x] Spring

**CAMPUS(ES) INVOLVED:**

- Calumet
- Cont Ed
- Ft. Wayne
- N. Central
- Tech Statewide
- W. Lafayette
- Indianapolis

**CREDIT TYPE**

1. Fixed Credit: Cr. Hrs. [ ] 1
2. Variable Credit Range:
   - Minimum Cr. Hrs. [ ] 3
   - (Check One) To Or [ ]
   - Maximum Cr. Hrs. [ ]
3. Equivalent Credit: Yes [x] No [ ]
4. Thesis Credit: Yes [ ] No [x]

**INSTRUCTIONAL TYPE**

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Recitation</th>
<th>Presentation</th>
<th>Laboratory</th>
<th>Lab Prep</th>
<th>Studio</th>
<th>Distance</th>
<th>Clinic</th>
<th>Experiential</th>
<th>Research</th>
<th>Ind. Study</th>
<th>Pract/Observ</th>
</tr>
</thead>
<tbody>
<tr>
<td>75</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**MEETINGS PER WEEK**

- [ ] 10

**WEEKS OFFERED**

- [ ]

**% OF CREDIT ALLOCATED**

- [ ]

**DELIVERY METHOD**

- [ ] Asyn. Or Syn.
- [ ] LIVE
- [ ] Text-Based, Video
- [ ] Cross-Listed Courses

**COURSE DESCRIPTION (INCLUDE REQUISITES):**

P: Consent of Instructor.

This course acquaints users with computer, digital, and telecommunications technologies necessary for personal and professional productivity. Students will learn the importance of protecting computers in cyberspace; how to apply security in homes and small businesses; and how to make cost-effective choices among hardware, software, and service alternatives in today's marketplace.

**Calumet Department Head**

**Date**

**Calumet School Dean**

**Date**

**Fort Wayne Department Head**

**Date**

**Fort Wayne School Dean**

**Date**

**Indianapolis Department Head**

**Date**

**Indianapolis School Dean**

**Date**

**North Central Department Head**

**Date**

**North Central Chancellor**

**Date**

**West Lafayette Department Head**

**Date**

**West Lafayette College/School Dean**

**Date**

**West Lafayette Registrar**

**Date**
CIT 301 Applied Consumer Technologies

Course Description:
This course will provide an introduction to the consumer technologies that are pervasive and vital for today's end user. Students will learn the importance of protecting computers in cyberspace and how to apply security in homes and small businesses. Students will learn how to use various sources of information to make cost-effective choices among hardware, software, and service alternatives in today's marketplace.

Objectives:

- Fundamental issues in Information Security and Assurance
- Common threats facing a typical home and organization
- Issues and vulnerabilities associated with an organization's normal use of networks and the Internet
- Essential elements and implementation of firewalls
- Essential elements and implementation of anti-virus protection
- Importance of security patches
- Perform a telecommunications bill audit
- Identify forms of transmission for video service
- Identify forms of transmission for voice service
- Identify forms of transmission for data service
- Analyze benefits and costs of bundled services
- Differentiate between types of media sharing equipment
- Differentiate between types of media sharing services
- Analyze ways to utilize technology in the home
- Compare forms of personal digital equipment
- Understand how government policies affect consumer choice
- Understand how technology standards affect consumer choice
- Develop ideal entertainment and communications solution for an individual
- Identify future challenges to the consumer in using, storing, and sharing media
- Discover the cost benefit to being an early adopter

Justification: The University needs a better way to acquaint regular computer and digital users in all majors with the technologies that they need to be productive at home, school, and work. There is no class on campus that addresses these issues.

Overlap: no current course overlap exists
CIT 301
Applied Consumer Technologies

Tentative Weekly Schedule

<table>
<thead>
<tr>
<th>Week#</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Introduction. Discuss course syllabus and schedule. Discuss the different aspects of consumer technologies.</td>
</tr>
<tr>
<td>Week 2</td>
<td>Fundamental issues in Information Security and Assurance</td>
</tr>
<tr>
<td></td>
<td>Common threats facing a typical home and organization</td>
</tr>
<tr>
<td>Week 3</td>
<td>Issues and vulnerabilities associated with an</td>
</tr>
<tr>
<td></td>
<td>organizations normal use of networks and the Internet.</td>
</tr>
<tr>
<td>Week 4</td>
<td>Essential elements and implementation of firewalls</td>
</tr>
<tr>
<td></td>
<td>Firewall Lab</td>
</tr>
<tr>
<td>Week 5</td>
<td>Essential elements and implementation of anti-virus protection</td>
</tr>
<tr>
<td>Week 6</td>
<td>Install antivirus and run scans. Importance of security patches</td>
</tr>
<tr>
<td>Week 7</td>
<td>MIDTERM</td>
</tr>
<tr>
<td>Week 8</td>
<td>Perform a telecommunications bill audit</td>
</tr>
<tr>
<td></td>
<td>Identify forms of transmission for video service</td>
</tr>
<tr>
<td>Week 9</td>
<td>Identify forms of transmission for voice service</td>
</tr>
<tr>
<td>Week 10</td>
<td>Identify forms of transmission for data service</td>
</tr>
<tr>
<td>Week 11</td>
<td>Analyze benefits and costs of bundled services</td>
</tr>
<tr>
<td>Week 12</td>
<td>Differentiate between types of media sharing equipment</td>
</tr>
<tr>
<td></td>
<td>Differentiate between types of media sharing services</td>
</tr>
</tbody>
</table>
Week 13  Analyze ways to utilize technology in the home
         Compare forms of personal digital equipment
         Understand how government policies affect consumer
         choice

Week 14  Understand how technology standards affect consumer
         Choice. Develop ideal entertainment and communications
         solution for an individual

Week 15  Identify future challenges to the consumer in using,
         storing and sharing media; Discover the cost benefit to
         being an early adopter

Week 16  Final Presentations
PURDUE SCHOOL OF ENGINEERING & TECHNOLOGY
COURSE OUTCOMES AND ASSESSMENT DATA SHEET

This is an internal document to identify and record expected outcomes and anticipated assessment strategies for all courses taught within the School of Engineering and Technology. Submission of this form, as noted below, is required and must accompany all new course and course change requests. Copies of this form should also be retained within the department and kept on file with the outline or syllabus for each course.

Course Number: CIT301 Course Title: Applied Consumer Technologies

Procedure:

1. First, identify all instructional outcomes expected for this course, and then select all ABET outcomes which are consistent with those anticipated objectives from TABLE 1 below.

<table>
<thead>
<tr>
<th>#</th>
<th>TECHNOLOGY - TAC Criteria #1 (Proposed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Demonstrate an appropriate mastery of the knowledge, techniques, skills and modern tools of their discipline.</td>
</tr>
<tr>
<td>2</td>
<td>Apply current knowledge and adapt to emerging applications in mathematics, science, engineering and technology.</td>
</tr>
<tr>
<td>3</td>
<td>Conduct, analyze and interpret experiments and apply experimental results to improve processes.</td>
</tr>
<tr>
<td>4</td>
<td>Apply creativity in the design of systems, components or processes appropriate to program objectives.</td>
</tr>
<tr>
<td>5</td>
<td>Function effectively on teams.</td>
</tr>
<tr>
<td>6</td>
<td>Identify, analyze and solve technical problems.</td>
</tr>
<tr>
<td>7</td>
<td>Communicate effectively.</td>
</tr>
<tr>
<td>8</td>
<td>Recognize the need for and possesses the ability to pursue lifelong learning.</td>
</tr>
<tr>
<td>9</td>
<td>Understand professional, ethical and societal responsibilities.</td>
</tr>
<tr>
<td>10</td>
<td>Recognize contemporary professional, societal and global issues and be aware of and respect diversity.</td>
</tr>
<tr>
<td>11</td>
<td>Have a commitment to quality, timeliness and continuous improvement.</td>
</tr>
</tbody>
</table>

2. Subsets for each of the six IUPUI Principles of Undergraduate Learning (PUL) are given on the reverse side in TABLE 2. Using a number corresponding to each ABET outcome identified from TABLE 1 above to select a column, place a “√” or “X” mark in the applicable TABLE 2 row(s) cell for each PUL. Courses will often address multiple ABET outcomes and ABET outcomes frequently will overlap more than one PUL subset. Thus, it is expected completed data sheets may contain marks in several cells thereby indicating the course simultaneously satisfies multiple Principles of Undergraduate Learning while fulfilling its intended ABET objective(s).

3. After completing TABLE 2, briefly define or explain how the course outcomes or objectives will be evaluated within the context of the departmental assessment program in the space below:

Student projects, team presentations, exercises, and tests

Submitted by: ___________________________ Date: 4/21/08
TABLE 2 - MATRIX OF EXPECTED COURSE OUTCOMES
(Suggestion - while completing Table 2, place a copy of the ABET outcomes from Table 1 along side for easy cross referencing.)

| PRINCIPLES OF UNDERGRADUATE LEARNING - "Require All Students to Demonstrate An Ability to:"
<table>
<thead>
<tr>
<th>TECHNOLOGY OUTCOMES - TAC CRITERIA #1: items (a) to (k)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(a) - Express ideas and facts effectively in written formats</td>
</tr>
<tr>
<td>1(b) - Comprehend, interpret, and analyze texts</td>
</tr>
<tr>
<td>1(c) - Communicate orally in one-on-one and group settings</td>
</tr>
<tr>
<td>1(d) - Solve problems that are quantitative in nature</td>
</tr>
<tr>
<td>1(e) - Make efficient use of information resources and technology for personal and professional needs</td>
</tr>
<tr>
<td>2(a) - Analyze complex issues and make informed decisions</td>
</tr>
<tr>
<td>2(b) - Synthesize information in order to arrive at reasoned conclusions</td>
</tr>
<tr>
<td>2(c) - Evaluate the logic, validity, and relevance of data</td>
</tr>
<tr>
<td>2(d) - Solve challenging problems</td>
</tr>
<tr>
<td>2(e) - Use knowledge and understanding to generate and explore new questions</td>
</tr>
<tr>
<td>3(a) - Apply knowledge to enhance personal lives</td>
</tr>
<tr>
<td>3(b) - Apply knowledge to meet professional standards and competencies</td>
</tr>
<tr>
<td>3(c) - Apply knowledge to further the goals of society</td>
</tr>
<tr>
<td>4(a) - Demonstrate substantial knowledge and understanding of at least one field of study</td>
</tr>
<tr>
<td>4(b) - Compare and contrast approaches to knowledge in different disciplines</td>
</tr>
<tr>
<td>4(c) - Modify their approach to an issue or problem based on the contexts and requirements of particular situations</td>
</tr>
<tr>
<td>5(a) - Compare and contrast the range of diversity and universality in human history, societies, and ways of life</td>
</tr>
<tr>
<td>5(b) - Analyze and understand the interconnectedness of global and local concerns</td>
</tr>
<tr>
<td>5(c) - Operate with civility in a complex social world</td>
</tr>
<tr>
<td>6(a) - Make informed and principles choices regarding conflicting situations in their personal and public lives and to foresee the consequences of these choices</td>
</tr>
<tr>
<td>6(b) - Recognize the importance of aesthetics in their personal lives and to society</td>
</tr>
</tbody>
</table>

Assessment Criteria & Outcomes - November 8, 1999