

# Lower Division University Course Form

**For help filling out the form press F1 or look at the bottom at the screen. For additional instructions, see Course Form Instructions.**

**Type of Action**      **Lower Division University Course - Request to offer a lower academic division course from a four-year state supported college or university. See Rules of the Senate (Section III 2.5).**

**Notification to University**      **According to Rules of the Senate (Section III, 2.5), the college will document notification to the appropriate university department of its intent to offer the course.**

**Provide documentation of “notification to the appropriate university department of its intent to offer the course.”**

**Documentation is attached?**  **Yes**    **No**

During a meeting at NKU (July 23, 2012) to discuss a 2+2 transfer agreement and 4 articulation agreements, verbal notification was given to adopt NKU INF courses. Attached is a letter from NKU expressing interest to move forward with the agreements. Formal, written notification for course adoption will follow when the focus area is approved.

**General Education Status:**      **Any university course or combination of university courses that can be used to satisfy the university requirements for a general education category will also satisfy the KCTCS requirements for that general education category.**

**Does this course satisfy university requirements for general education status at the offering university?**    **Yes**    **No**

**Documentation attached?**    **Yes**    **No**

**If yes, what attribute (category) has been assigned?**

1. Name of institution and state that originally offers the course.

**Northern Kentucky University**

2. Course Prefix and Number:      **INF 128**

3. Course Title:      **Principles of Informatics**

4. Submitting Entity: Curriculum Committee:

College:

**Bluegrass Community and Technical College**

## 5. Justification for Course:

This course would be used to support a new Associate of Science focus area in Informatics. The use of the course from Northern Kentucky University (NKU) would support four planned articulation agreements that we have discussed with NKU's department of Communications (Media Informatics) and department of Computer Science (Computer Science and Computer Information Technology). Using this course would facilitate the transfer of Bluegrass Community and Technical College (BCTC) Informatics students to NKU to complete their Bachelor of Science (BS) degree or Bachelor of Arts (BA) degree in an Informatics discipline.

6. Will this course be a part of approved curriculum/curricula?  Yes  No  
If yes, which curriculum/curricula?

**Associate of Science with a Focus in Informatics**

7. Person(s) Primarily Responsible for Proposal (**Verify that members are still current and active prior to submission.**):

<u>Name</u>	<u>Teaching Area</u>	<u>College</u>
<b>Cindy Tucker</b>	<b>CIT</b>	<b>BCTC</b>
<b>Melanie Williamson</b>	<b>CIT</b>	<b>BCTC</b>
<b>Debbie Holt</b>	<b>CIT</b>	<b>BCTC</b>
<b>Don Halcomb</b>	<b>CIT</b>	<b>BCTC</b>
<b>Thomas Papanicolaou</b>	<b>CIT</b>	<b>BCTC</b>
<b>Gary Cunningham</b>	<b>CIT/Business</b>	<b>SCC</b>
<b>Lois McWhorter</b>	<b>CIT/Business</b>	<b>SCC</b>
<b>Janet Garrison</b>	<b>CIT</b>	<b>MCTC</b>

8. Involvement of Others (Designate Individuals):

a. System Office Staff: **Mary Kleber**  
b. Others:

9. **PROPOSED** **Spring 2013**  
**EFFECTIVE DATE:**

10. Proposed Course Designations:

Credit / Contact Hours:	10a. Credit Hours: <b>3</b>	Minimum 3	Maximum 3
	10b. Contact Hours: <b>45</b>	If lab, etc., ratio of contact hours to credit hours. (See contact/ credit hour ratio chart)	

10c. Requisites:  
Pre-requisites:  Yes  No

If yes, list:

One of the following: INF 101, INF 110, or INF 120

Co-requisites:  Yes  No      If yes, list: CMST 101 or CMST 110

NOTE: CMST 101 is Public Speaking. CMST 110 is Introduction to Communication Studies.

11. 11a. Grading Basis :  Letter Grades       Pass/Fail       Letter Grades/NO GPA

11b. Repeat for additional credit:       Yes       No

If yes, how many times:      Indicate total credit earned in course:

12. Course Components (check all that require scheduling)

Lecture       Lab       Clinical       Practicum       On-line Course

13. Description:

Course developing awareness of an information-centric world. Information, communication, computation. Data-driven decision making strategies, information sharing technologies, data encoding, cooperative skills, knowledge sharing, organizing, media literacy. Preparation for upper-level courses in business informatics, communication, computer science, and other informatics disciplines.

NOTE: This is the NKU catalog description.

Additional information for the course description from an NKU current syllabus for the course:

This course enables students of all academic backgrounds to develop the knowledge, skills, and perspectives needed to effectively participate as a citizen, producer, and consumer in an information-driven society. Students will learn the fundamentals of informatics, including what information, communication, and computation are, along with how information is encoded, stored, communicated, and processed. They will also learn multiple techniques to find information, evaluate its quality, and make sense of it. The learning experience will be divided evenly between lecture and active learning sessions in the classroom, while students work in teams outside of class on a project, learning about information communication technologies.

14. Course Competencies (**Begin statement with a capital letter and end with a period.**):

**By the end of the term, a successful student should be able to:**

1. Define and identify terms, concepts, and current practice of informatics.
2. Find, interpret, and evaluate information, including the assumptions, evidence, and theories behind it using multiple techniques and tools.
3. Evaluate the capabilities of information communication technologies based on an understanding of the scientific principles of informatics, such as the existence and limits of universal digital computers.
4. Explain how the design of information communication, technologies such as the Internet, influence human behavior.
5. Understand how information communication technology influences the creation of shared meaning.

NOTE: These are NKU's competencies.

15. **Course outline (Two-level outline required):**

This course will include the following topics in order:

- I. What is Informatics?
  - A. Definition
  - B. Fields of Study
- II. Project Management and Teamwork
  - A. Definition
  - B. Uses within a Business
  - C. Personnel Challenges
  - D. Software Available
- III. Information and Encoding
  - A. Definitions
  - B. Importance of Use
  - C. Potential Problems
- IV. Data Representations
  - A. Analog
  - B. Digital
- V. Atoms and Bits
  - A. Definition
  - B. How the Relationships Apply to Informatics
  - C. Digitizing Science
- VI. Communication
  - A. Importance within Team
  - B. Importance Between Team and Management
  - C. Importance Between Team and Client
- VII. Information Retrieval and Quality
  - A. Methods of Retrieval
  - B. Quality – Integrity
  - C. Quality – Completeness
  - D. Quality – Validity
- VIII. Sense Making
  - A. Definition
  - B. Uses in Informatics to Make Sense of the World
- IX. Journalism and Social Media
  - A. Definition
  - B. Uses of Informatics within Journalism
  - C. Uses of Informatics within Social Media
- X. Machiavelli and the Informatics of Evil
  - A. Who Controls the Internet?
  - B. Ethics Related to Informatics
- XI. Algorithms and Limits of Computation
  - A. Definition
  - B. Uses of Informatics within Computer Science
  - C. Common Algorithms Used in Informatics
- XII. Pandora's Genome
  - A. Definition
  - B. Uses of Bioinformatics
- XIII. Computation and Thinking
  - A. Definition
  - B. Algorithm Development
- XIV. Networks, Crowds, and Markets
  - A. Definition
  - B. Importance of Network Storage and Structure
- XV. How the Internet Works

- A. Definition
- B. Searches and Informatics
- C. Data Organization and Informatics
- XVI. Internet Governance and Copyright
  - A. Definitions
  - B. History
  - C. Legal Issues
  - D. Copyrights
  - E. Censorship
- XVII. Security and Privacy
  - A. Definitions
  - B. Legal Issues
  - C. Methods of Security

16. List of experiments/activities (If laboratory or clinic is involved):

17. Indicate suggested Learning Resources

**Example:**

**Sorrentino, S. A., & Gorek, B. (2010). *Mosby's textbook for long-term care assistant* (6<sup>th</sup> ed.). St. Louis, MO: Elsevier/Mosby-Year Book, Inc.**

### **SUGGESTED LEARNING RESOURCES FOR THIS COURSE**

Resources for this class will be online articles, videos from guest speakers on their specialized field of expertise in Informatics, and resources shared from NKU regarding this course. Because it is a survey class there is no one textbook that could provide the appropriate content.

**Submit form, documentation of notification to the appropriate university department of its intent to offer the course, and signature page or minutes of local CRC meeting to Mary Kleber at [Mary.Kleber@kctcs.edu](mailto:Mary.Kleber@kctcs.edu).**