

# Course Syllabus

[Jump to Today](#)

[Edit](#)

## Informatics Foundations | Fall 2019 | Section 16117

### Instructor Contact Information

Instructor: Chuck Stapke

- Contact: *Canvas e-mail is my preferred means of contact. I will return your e-mails within 48 business hours. Usually the same day. In case of emergency only email me at [cstapke@iun.edu](mailto:cstapke@iun.edu)*
- Phone: 219-985-4074 (First attempt, then text, then call).
- Office: Hawthorne 333
- Office Hours: Thursday 5:00 – 7:00 or [by appointment \(Links to an external site.\)](#)

### Prerequisites

None.

### Course Description

Introduction to informatics, basic problems solving and elementary programming skills. It also provides a survey of computing tools in the context of selected disciplines (cognates).

### Course Website

You will participate in this course using the [IU Canvas learning management platform \(Links to an external site.\)](#) system. Once you are in the platform you can learn how to use Canvas effectively, by clicking the “Help” link on the bottom left of the course navigation plain in Canvas.

### Program and Course Outcomes

Below is a list of the Program Outcomes and underneath are the course objectives that align with these.

1. **Foundations of Informatics and Computing**
  1. Basics of computers and informatics (including hardware, software, survey of informatics cognates)

2. Number system (basic info representation: Binary, Octal, Hex)
2. **Problem Solving and programming concepts**
  1. Demonstrate basic problem solving (for example pseudocoding, flow charting) techniques
  2. Demonstrate Low level representation of data (bit, byte, int, float, char, unicode, string, audio, video, image)
  3. Demonstrate basic programming skills (including: variables, conditionals, loops, sub programs, and parameter passing)
  4. Demonstrate proficiency in at least one programming language Proficiency in at least one programming language. Proficiency is defined as the ability to design, implement, test, and debug structured and object-oriented programs.
  5. Demonstrate the ability to discuss and/or construct memory based structures and algorithms (Arrays (single, multidimensional), Lists (single, double, circular), stacks, queues, binary trees)
3. **Analysis and design of large systems**
  1. Demonstrate the ability to use object oriented modeling to devise a solution to a large scale problem
  2. Demonstrate the ability to perform functional decomposition of a large-scale problem
  3. Demonstrate the ability to identify elements of proper interface design, and ability to build user-centered interfaces. (HCI)
4. **Collaborative teamwork with emphasis on Virtual teams**
  1. Demonstrate proficiency of contemporary technological tools for communication and collaboration
5. **Societal and ethical implications of becoming an informatics professional**
  1. Articulate legal and ethical issues when using the creative work of others; respect the intellectual property of others
6. **Application of Informatics Skills to another Area of Specializations (Cognate)**
  1. Assessed by each cognate area

## Course Requirements

### Required Text

*Understanding Computers Today and Tomorrow Comprehensive* (16<sup>th</sup> Edition). Morely, D., & Parker, C.S. Stamford, CT: Delmar, 2016.

### Technical Requirements

You will need the following hardware in order to participate in this course:

- Computer;
- Reliable internet connection;
- Computer microphone;
- Some way to make and post a simple video (e.g., using a webcam, or a smart phone);

- Open Canvas in Chrome or Mozilla Firefox browser

You will need the following latest version of software in order to participate in this course:

- [Adobe Reader \(Links to an external site.\)](#)
- [Adobe Flash Player \(Links to an external site.\)](#)
- PPT 2007 or higher
- Microsoft Office 2007 or higher

Microsoft Office, Adobe Acrobat, and many other programs are available **free to you as an IU student** through Indiana University's license agreements. You can download most of these programs directly at [IUware Online \(Links to an external site.\)](#). IUware requires you to log in with your IU username and passphrase. Not all software is available online. If you need a program on a DVD, you can purchase discs through all campus bookstore or through [IUware Off-Campus Software Publishing. \(Links to an external site.\)](#)

## Technical Support

You may also receive support from

- [University Information Technology Services \(UITS\) \(Links to an external site.\)](#) (human support)
- [IU Knowledge Base \(IUKB\) \(Links to an external site.\)](#) (guides)
- [IUware \(Links to an external site.\)](#) (download free software)

## Descriptions of Course Activities and Assignments

### Module Activities (Worth 75%)

Each module will include activities that help students practice their newly learned terminology and skills. These can include Canvas Quick Check Quizzes, Simulations, analyzing inventions and impacts, programming a game, describing a product life cycle plan, reviewing an interface, and reflecting on your evolving definition of informatics.

### Reflection Discussions (Worth 10%)

There are three key discussions in the course and they will help you to articulate your understanding of informatics, and help track your evolving understanding as the course progresses.

### CNPosts (Worth 15%)

This is a lively conversational community space to share your interests and findings related to the cognate (fields) of informatics throughout the course.

## Overview of the Assignment Grades

The table below gives a summary of the types of assignments and their percentage worth in the course.

### Assignment Percentage

**Module  
Activities** 75%

**Reflection  
Discussions** 10%

**CNPosts** 15%

### Grading Scale

**Grade**    **% Range**

**A**            94-100

**A-**            90-93

**B+**            87-89

**B**             84-86

**B-**            80-83

**C+**            77-79

<b>C</b>	74-76
<b>C-</b>	70-73
<b>D+</b>	67-69
<b>D</b>	64-66
<b>D-</b>	60-63
<b>F</b>	<60%

## Indiana University Policies

### Accommodations

Every attempt will be made to accommodate qualified students with disabilities (e.g. mental health, learning, chronic health, physical, hearing, vision neurological, etc.) You must have established your eligibility for support services through the appropriate office that services students with disabilities. Note that services are confidential, may take time to put into place and are not retroactive; Captions and alternate media for print materials may take three or more weeks to get produced. Please contact your campus office as soon as possible if accommodations are needed. [Find your campus office serving students with disabilities \(Links to an external site.\)](#).

### Intellectual Dishonesty

All work should be your original product, unless explicitly noted otherwise. Any materials you reference or take from others should be properly cited. Cheating, plagiarism, or fabrication in any form will not be tolerated, regardless of any justification. For more detailed information see the [Student Responsibilities section of the Code of Student Rights, Responsibilities, and Conduct \(Links to an external site.\)](#). Academic misconduct will not be tolerated. The minimum consequence is failing the assignment. In a case of more serious offense, a student may fail the course. **Students should NOT present work from other courses in this class (i.e., using pieces of previous papers you have done is considered plagiarism)**. I may use the services of Turnitin.com to check for originality of your written work.

### Title IX Sexual Misconduct

As your instructor, one of my responsibilities is to help create a safe learning environment on our campus. Title IX and our own Sexual Misconduct policy prohibit sexual misconduct. If you have experienced sexual misconduct, or know someone who

has, the University can help. I encourage you to visit [Stop Sexual Violence website \(Links to an external site.\)](#) to learn more. If you are seeking help and would like to speak to someone confidentially, you can make an appointment with a [Mental Health Counselor on campus. \(Links to an external site.\)](#)

It is also important that you know that federal regulations and University policy require me to promptly convey any information about potential sexual misconduct known to me to our Deputy Title IX Coordinator or IU's Title IX Coordinator. In that event, they will work with a small number of others on campus to ensure that appropriate measures are taken and resources are made available to the student who may have been harmed. Protecting a student's privacy is of utmost concern, and all involved will only share information with those that need to know to ensure the University can respond and assist.

## Code of Student Rights, Responsibilities, and Conduct

Students are expected to adhere to the Code of Student Rights, Responsibilities, and Conduct at all times. Any inappropriate behavior, disruptive conduct (e.g., engaging in hostile or disrespectful commentary on the site, or discussing irrelevant evidence) or non-compliance with faculty directions can result in a charge of Academic and/or Personal Misconduct, the consequence of which could be a variety of sanctions either from the instructor or the Dean of Students. For more information see [\(Links to an external site.\)](#)

## Grading Policies

The following includes highlights paraphrased from several campus or university policies pertaining to grades and grading. For official descriptions of these and other related policies, click the Campus Course Policies button on your Canvas tool bar and then click the link for x Campus Academic Policies.

### Grade Appeal

If you believe the grade received in a course is incorrect, you should follow the Grade Appeal Policy. The initial appeals process states that .....

### Dropping a Course

During the first week of classes you may drop a class with no grade recorded on your transcript. From the second week of classes through the ninth week (the 'auto W' period), you may withdraw from a class with an automatic grade of 'W'. This will be recorded on your transcript, but not included in your GPA.

After the ninth week (and before the final exam period), a student wishing to withdraw with a grade of 'W' must be passing the course at that time. You must complete a 'Drop Only' form and contact the offices listed for signatures before giving the form to the instructor. The instructor will confirm on the form that you are passing at that time for a 'W' grade or that your grade is an 'F'. This 'F' grade WILL be included in calculation of your GPA.

Faculty members are required to report any student who stops attending a class and does not withdraw (with a grade of 'W' or 'F'). Failure of a course due to non-attendance may affect financial aid award amounts.

## Course Summary:

Date	Details		
Sun Sep 1, 2019	Assignment	<a href="#">Download IDE (NetBeans)</a>	due by 11:59pm
	Assignment	<a href="#">Introductions</a>	due by 11:59pm
	Assignment	<a href="#">Practice using eText</a>	due by 11:59pm
Sun Sep 8, 2019	Assignment	<a href="#">Timeline Assignment</a>	due by 11:59pm
	Assignment	<a href="#">CN Post - Security Informatics</a>	due by 11:59pm
Sun Sep 15, 2019	Assignment	<a href="#">Systems Part 2</a>	due by 11:59pm
	Assignment	<a href="#">CN Post - Legal Informatics</a>	due by 11:59pm
	Assignment	<a href="#">Input Output Part 1</a>	due by 11:59pm
	Assignment	<a href="#">Input Output Part 2</a>	due by 11:59pm
	Assignment	<a href="#">Input Output Part 3</a>	due by 11:59pm
Sun Sep 22, 2019	Assignment	<a href="#">CNPost - Health Information Management</a>	due by 12:59am
	Assignment	<a href="#">Quiz on Computer Basics</a>	due by 11:59pm
	Assignment	<a href="#">Shopping for Different Professions   Final Challenge</a>	due by 11:59pm
	Assignment	<a href="#">Storage Part 1</a>	due by 11:59pm
	Assignment	<a href="#">Storage Part 2</a>	due by 11:59pm
	Assignment	<a href="#">Storage Part 3</a>	due by 11:59pm
	Assignment	<a href="#">Storage Part 4</a>	due by 11:59pm
Assignment	<a href="#">Systems Part 1</a>	due by 11:59pm	

Date	Details		
Sun Sep 29, 2019	Assignment	<a href="#">CN Post - HCI</a>	due by 12:59am
	Assignment	<a href="#">Activity: Describe an Algorithm</a>	due by 11:59pm
	Assignment	<a href="#">Activity: Try Programming</a>	due by 11:59pm
	Assignment	<a href="#">Quiz 4.1: Conversion Binary Decimal Hex</a>	due by 11:59pm
	Assignment	<a href="#">Quiz 4.2: Data and Program Representation</a>	due by 11:59pm
Sun Oct 6, 2019	Assignment	<a href="#">Activity: "Hello World" in Java</a>	due by 12:59am
	Assignment	<a href="#">Activity: Help with the Poor Design!</a>	due by 11:59pm
	Assignment	<a href="#">CNPost - Entrepreneurship</a>	due by 11:59pm
	Assignment	<a href="#">Interface QuickCheck</a>	due by 11:59pm
Sun Oct 13, 2019	Assignment	<a href="#">CNPost - Web Development - Design</a>	due by 12:59am
	Assignment	<a href="#">Programming: Hello World Copy</a>	due by 11:59pm
	Assignment	<a href="#">Reflection on Cognate</a>	due by 11:59pm
	Assignment	<a href="#">Programming with Blockly: Level 1</a>	due by 11:59pm
	Assignment	<a href="#">Programming with Blockly: Level 2</a>	due by 11:59pm
	Assignment	<a href="#">Quick Check Activity : Understanding Programming Basics</a>	due by 11:59pm
	Assignment	<a href="#">Writing Algorithms</a>	due by 11:59pm
Sun Oct 20, 2019	Assignment	<a href="#">Assignment: Java Programming Exercise (1)</a>	due by 11:59pm
	Assignment	<a href="#">Assignment: Java Programming Exercise (2)</a>	due by 11:59pm
	Assignment	<a href="#">Reflection on Cognates Discussion</a>	due by 11:59pm
	Assignment	<a href="#">CN Post - Web Programming</a>	due by 11:59pm
	Assignment	<a href="#">Java Hello World Lab (Chapter 1)</a>	due by 11:59pm



<b>Date</b>	<b>Details</b>		
Sun Oct 27, 2019	Assignment	<a href="#">CN Post - Business Informatics</a>	due by 12:59am
	Assignment	<a href="#">Activity: A Number Guessing Game (1)</a>	due by 11:59pm
Sun Nov 3, 2019	Assignment	<a href="#">Activity: A Number Guessing Game (2)</a>	due by 11:59pm
	Assignment	<a href="#">Activity: A Number Guessing Game (3)</a>	due by 11:59pm
	Assignment	<a href="#">CNPost - DataScience</a>	due by 11:59pm
Sun Nov 10, 2019	Assignment	<a href="#">C100 Course Survey</a>	due by 11:59pm
	Assignment	<a href="#">Quiz 7: SDLC and PDLC</a>	due by 11:59pm
	Assignment	<a href="#">CNPost - Big Data</a>	due by 11:59pm
Sun Nov 17, 2019	Assignment	<a href="#">Module 8 - Project SDLC and PDLC Template</a>	due by 11:59pm
	Assignment	<a href="#">CN Post - Bio Informatics</a>	due by 11:59pm
Sun Nov 24, 2019	Assignment	<a href="#">Module 8 - Project SDLC and PDLC Elevator Pitch</a>	due by 11:59am
Sun Dec 8, 2019	Assignment	<a href="#">Discussion / Forum 7</a>	due by 11:59pm
Sun Dec 15, 2019	Assignment	<a href="#">Reflection Paper on Informatics</a>	due by 11:59pm