CIT 21300: Systems Analysis & Design

When Is Class?
Class meets Monday and Wednesday from 10:30 - 11:45 in ET 329.

What's a Typical Week Like?
This class will be presented using a "flipped classroom" model, and students will be expected to come to class prepared to dive in.

- *Friday - Sunday:* Reading and Prep Exercises
- *Monday - Wednesday:* Demonstration and In-Class Exercises
- *Thursday:* Assignment is Due

Where Are My Class Resources?
The three most important Canvas LMS tools are: Syllabus, Assignments, and Pages

- **Modules:** There is a Page for each week of the course. All videos, PowerPoints, sample files, and resource links will be posted here.
- **Assignments:** All of your Assignments are posted here and should be submitted via Canvas. (*No late assignment submissions!* See the Late Policy in the Syllabus for more information.)
- **Syllabus:** Changes will be made if necessary, and students will be emailed accordingly.

How Many Points Possible Are There in the Course?
Your course grade is calculated based on Assignments provided via Canvas as well as any in-class exercises or quizzes that are given. ***Not all classroom exercises or quizzes are announced.*** If you miss any in-class activity without prior authorization, you have missed those points. No make-ups.

Therefore, the total number of points possible will be adjusted as the semester proceeds.

Is There a Final Exam?
No.

Students will complete a Final Project over the last few weeks of the semester but there will be no scheduled Final Exam.

Table of Contents

Course Resources

Textbooks The **required** textbooks for this course are:

The Object-Oriented Thought Process [(Amazon link)](#)
Paperback: 360 pages
Publisher: Addison-Wesley Professional; **5th** edition
ISBN-13: 978-0135181966

Learning UML 2.0 [(Amazon link)](#)
By Russ Miles, Kim Hamilton
Publisher: O'Reilly Media
ISBN: 978-0-596-00982-3

We will also use select resources from around the web which will be provided to you.

Software Most of your coursework will involve documents and drawings.

At a minimum, students will need the following:
- Adobe Acrobat Reader or equivalent PDF reader
- An active IU/IUPUI email address

We will also introduce an online drawing tool that is available for free to students to use.

Course Goals and Requirements

Course Objectives This class provides a high-level overview for a large number of topics. However, you will use the knowledge you have gained in each module on an ongoing basis throughout this course as well as subsequent systems analysis courses.

By the end of the semester, each student should be able to:
- Learn the terminology of systems analysis and design
- Apply the object-oriented approach to systems development
- Demonstrate and develop problem-solving skills in a team environment
- Become functionally knowledgeable of UML modeling techniques and tools
- Develop and document a web-based prototype

Prerequisites The official prerequisites for this course are CIT 14000 or CIT 21500. Students must also have had 21400 or be currently enrolled in it.

ABET Outcomes
- Analyze user needs and identify the computing requirements appropriate to an IT solution.

- Plan, design, implement, and evaluate IT-based projects and systems to meet desired needs. Function effectively on teams to accomplish a common goal.
- Communicate effectively with a wide range of audiences.
- Use current technical concepts, techniques and practices in the information technologies within the student's area of expertise.

You're not finished!

The remainder of the Syllabus can be found here.