

## Course Information

Date Submitted: 12/9/2016

Current Prefix and Number: CE - Civil Engineering , CE 106 COMPUTER GRAPHICS/COMMUN

Other Course:

Proposed Prefix and Number: CE 106

What type of change is being proposed?

Major Change

Should this course be a UK Core Course? No

## 1. General Information

a. Submitted by the College of: ENGINEERING

b. Department/Division: Civil Engineering

c. Is there a change in 'ownership' of the course? No

If YES, what college/department will offer the course instead: Select...

e. Contact Person

Name: Samantha Wright

Email: sam.wright@uky.edu

Phone: 3-1668

Responsible Faculty ID (if different from Contact)

Name:

Email:

Phone:

f. Requested Effective Date

Semester Following Approval: Yes OR Effective Semester:

## 2. Designation and Description of Proposed Course

a. Current Distance Learning (DL) Status: N/A

b. Full Title: COMPUTER GRAPHICS AND COMMUNICATION

Proposed Title: COMPUTER GRAPHICS AND COMMUNICATION

c. Current Transcript Title: COMPUTER GRAPHICS/COMMUN

Proposed Transcript Title: COMPUTER GRAPHICS/COMMUN

d. Current Cross-listing: none

Proposed – ADD Cross-listing :

Proposed – REMOVE Cross-listing:

e. Current Meeting Patterns

LECTURE: 2

LABORATORY: 4

Proposed Meeting Patterns

LECTURE: 2

LABORATORY: 3

f. Current Grading System: ABC Letter Grade Scale

Proposed Grading System: Letter (A, B, C, etc.)

g. Current number of credit hours: 3

Proposed number of credit hours: 3

h. Currently, is this course repeatable for additional credit? No

Proposed to be repeatable for additional credit? No

If Yes: Maximum number of credit hours:

If Yes: Will this course allow multiple registrations during the same semester? No

2i. Current Course Description for Bulletin: Introduction to the use of scale, dimensioning, and orthographic projections. Graphical solution of spatial problems. Integrated application of computer graphics. Lecture, two hours; laboratory, four hours per week.

Proposed Course Description for Bulletin: Introduction to visualization, orthographic projection, and computer-aided drawing. Graphical solution of spatial problems. Integrated use of computer graphics to create civil engineering drawings. Lecture, two hours; laboratory, three hours per week. Prereq or coreq: MA 113 or consent of instructor.

2j. Current Prerequisites, if any: Prereq or Coreq: MA 113 or consent of instructor.

Proposed Prerequisites, if any: Prereq or Coreq: MA 113 or consent of instructor.

2k. Current Supplementary Teaching Component:

Proposed Supplementary Teaching Component: No Change

3. Currently, is this course taught off campus? No

Proposed to be taught off campus? No

If YES, enter the off campus address:

4. Are significant changes in content/student learning outcomes of the course being proposed? No

If YES, explain and offer brief rationale:

5a. Are there other depts. and/or pgms that could be affected by the proposed change? **No**

If YES, identify the depts. and/or pgms:

5b. Will modifying this course result in a new requirement of ANY program? **No**

If YES, list the program(s) here:

6. Check box if changed to 400G or 500: **No**

## Distance Learning Form

Instructor Name:

Instructor Email:

Internet/Web-based: **No**

Interactive Video: **No**

Hybrid: **No**

1. How does this course provide for timely and appropriate interaction between students and faculty and among students? Does the course syllabus conform to University Senate Syllabus Guidelines, specifically the Distance Learning Considerations?

2. How do you ensure that the experience for a DL student is comparable to that of a classroom-based student's experience? Aspects to explore: textbooks, course goals, assessment of student learning outcomes, etc.

3. How is the integrity of student work ensured? Please speak to aspects such as password-protected course portals, proctors for exams at interactive video sites; academic offense policy; etc.

4. Will offering this course via DL result in at least 25% or at least 50% (based on total credit hours required for completion) of a degree program being offered via any form of DL, as defined above?

If yes, which percentage, and which program(s)?

5. How are students taking the course via DL assured of equivalent access to student services, similar to that of a student taking the class in a traditional classroom setting?

6. How do course requirements ensure that students make appropriate use of learning resources?

7. Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program.

8. How are students informed of procedures for resolving technical complaints? Does the syllabus list the entities available to offer technical help with the delivery and/or receipt of the course, such as the Information Technology Customer Service Center (<http://www.uky.edu/UKIT/>)?

9. Will the course be delivered via services available through the Distance Learning Program (DLP) and the Academic Technology Group (ATL)? **NO**

If no, explain how student enrolled in DL courses are able to use the technology employed, as well as how students will be provided with assistance in using said technology.

10. Does the syllabus contain all the required components? **NO**

11.I, the instructor of record, have read and understood all of the university-level statements regarding DL.

Instructor Name:

## SYLLABUS – FALL 2016

**COURSE:** CE 106 - COMPUTER GRAPHICS AND COMMUNICATION

**SECTIONS:**

**001 LECTURE:** MW 12:00-12:50, Sanders Hall  
**LAB:** F 10:00-12:50, RGAN 211

**002 LECTURE:** MW 12:00-12:50, Sanders Hall  
**LAB:** T 2:00-4:50, RGAN 211

**003 LECTURE:** MW 12:00-12:50, Sanders Hall  
**LAB:** R 2:00-4:50, RGAN 211

**INSTRUCTORS:** **Professor Samantha Wright, Lecturer**  
257 Raymond Building, (859) 323-1668, [sam.wright@uky.edu](mailto:sam.wright@uky.edu)  
Office Hours (or by appointment/email): MW 10:00 a.m.-12:00 noon

**Zak Pruitt, Teaching Assistant (Section 001)**

354A Oliver H. Raymond Building, [zak.pruitt@uky.edu](mailto:zak.pruitt@uky.edu)  
Office Hours: T 11:00-12:00, W 10:00-11:00, or by appointment

**Joe Humbert, Teaching Assistant (Section 002)**

C382 Oliver H. Raymond Building, [joseph.humbert@uky.edu](mailto:joseph.humbert@uky.edu)  
Office Hours: by appointment (F 8:00-10:00 a.m.)

**Majid Mahmoodabadi, Teaching Assistant (Section 003)**

C256 Oliver H. Raymond Building, [majid.mahmoodabadi@uky.edu](mailto:majid.mahmoodabadi@uky.edu)  
Office Hours: F 10:00a.m. - 12:00 noon

**TEXTBOOK:** *Introduction to AutoCAD 2016 for Civil Engineering Applications*, Nighat Yasim, ISBN-13: 978-1-58503-951-7

*Developing Spatial Thinking*, Sheryl Sorby, ISBN: 978-1-111-13906-3

**MATERIALS:** Pencils with erasers, straightedge, small stapler  
Flash drive dedicated for CE 106 or other electronic storage

**LINKS:** <http://www.uky.edu> - Link Blue  
<http://uk.instructure.com> - Canvas  
<http://www.students.autodesk.com> - AutoCAD

**COURSE DESCRIPTION:**

Introduction to visualization, orthographic projection, and computer-aided drawing. Graphical solution of spatial problems. Integrated use of computer graphics to create civil engineering drawings. Lecture, two hours; laboratory, three hours per week. Prereq or coreq: MA 113 or consent of instructor.

## STUDENT LEARNING OUTCOMES

**At the end of the course, a successful student will be able to:**

1. Communicate effectively, clearly and accurately using graphical drawings to solve Civil Engineering problems
2. Successfully utilize AutoCAD software to draw and assess Civil Engineering concepts, such as contour lines, land survey, drainage basins, roadway design, earthwork, structures, and site plans.
3. Contextually apply the use of AutoCAD as a tool (drawing is complete, accurate, and understandable to the viewer) and be able to analyze its results (information/calculations taken from the drawing are correct).
4. Use AutoCAD appropriately and effectively in any professional Civil Engineering capacity, such as internships, co-ops, or other employment opportunities

### GRADING PROCEDURE:

Student competency of the stated objectives will be evaluated by a minimum of two (2) exams, quizzes, classroom drawing assignments, and lab drawings in AutoCAD. Grading emphasis will be as follows:

Grading Component	Points
Classroom drawing assignments (10 @ 10 points each)	100
Lab drawings in AutoCAD (10 @ 15 points each)	150
Quizzes (5 @ 10 points each)	50
Exams (2 @ 100 points each)	200
<b>SUBTOTAL</b>	<b>500</b>
Unexcused absences (-10 points each)	-
<b>TOTAL</b>	<b>500</b>

Please note: attendance will be taken for scheduled lecture and lab sessions. Ten (10) points will be deducted from your grade for each unexcused absence.

Exams will be given at least twice during the semester, at mid-term and during finals week. Computer and drawing skills relative to the program and terminology will be evaluated. I expect that the work that you submit for grading is work that you have done yourself. If it is determined that this is not the case, you and the person that provided the material will be given a zero (0) for that particular graded assignment.

### ATTENDANCE:

Plan to attend all scheduled lectures and labs (please refer to Senate Rule 5.2.4.2 for excused absences). Please note that attendance will be taken for scheduled lecture and lab sessions. Ten (10) points will be deducted from your grade for each unexcused absence.

## **EXCUSED ABSENCES:**

Students need to notify the professor of absences prior to class when possible. *Senate Rules 5.2.4.2* defines the following as acceptable reasons for excused absences: (a) serious illness, (b) illness or death of family member, (c) University-related trips, (d) major religious holidays, and (e) other circumstances found to fit “reasonable cause for nonattendance” by the professor.

Students anticipating an absence for a major religious holiday are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays no later than the last day in the semester to add a class. Two weeks prior to the absence is reasonable, but should not be given any later. Information regarding major religious holidays may be obtained through the Ombud (859-257-3737, [http://www.uky.edu/Ombud/ForStudents\\_ExcusedAbsences.php](http://www.uky.edu/Ombud/ForStudents_ExcusedAbsences.php)).

Students are expected to withdraw from the class if more than 20% of the classes scheduled for the semester are missed (excused) per University policy.

Per *Senate Rule 5.2.4.2*, students missing any graded work due to an excused absence are responsible: for informing the Instructor of Record about their excused absence within one week following the period of the excused absence (except where prior notification is required); and for making up the missed work. The professor must give the student an opportunity to make up the work and/or the exams missed due to an excused absence, and shall do so, if feasible, during the semester in which the absence occurred.

## **VERIFICATION OF ABSENCES:**

Students may be asked to verify their absences in order for them to be considered excused. *Senate Rule 5.2.4.2* states that faculty have the right to request “appropriate verification” when students claim an excused absence because of illness, or death in the family. Appropriate notification of absences due to University-related trips is required prior to the absence when feasible and in no case more than one week after the absence.

## **ACADEMIC INTEGRITY:**

Per University policy, students shall not plagiarize, cheat, or falsify or misuse academic records. Students are expected to adhere to University policy on cheating and plagiarism in all courses. The minimum penalty for a first offense is a zero on the assignment on which the offense occurred. If the offense is considered severe or the student has other academic offenses on their record, more serious penalties, up to suspension from the University may be imposed.

Plagiarism and cheating are serious breaches of academic conduct. Each student is advised to become familiar with the various forms of academic dishonesty as explained in the Code of Student Rights and Responsibilities. Complete information can be found at the following website: <http://www.uky.edu/Ombud>. A plea of ignorance is not acceptable as a defense against the charge of academic dishonesty. It is important that you review this information as all ideas borrowed from others need to be properly credited.

*Senate Rules 6.3.1* (see <http://www.uky.edu/Faculty/Senate/> for the current set of *Senate Rules*)

states that all academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where students feel unsure about a question of plagiarism involving their work, they are obliged to consult their instructors on the matter before submission.

When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording, or content from another source without appropriate acknowledgment of the fact, the students are guilty of plagiarism.

Plagiarism includes reproducing someone else's work (including, but not limited to a published article, a book, a website, computer code, or a paper from a friend) without clear attribution. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work, which a student submits as his/her own, whoever that other person may be. Students may discuss assignments among themselves or with an instructor or tutor, but when the actual work is done, it must be done by the student, and the student alone.

When a student's assignment involves research in outside sources or information, the student must carefully acknowledge exactly what, where and how he/she has employed them. If the words of someone else are used, the student must put quotation marks around the passage in question and add an appropriate indication of its origin. Making simple changes while leaving the organization, content, and phraseology intact is plagiaristic. However, nothing in these Rules shall apply to those ideas, which are so generally and freely circulated as to be a part of the public domain.

Please note: Any assignment you turn in may be submitted to an electronic database to check for plagiarism.

#### **ACCOMMODATION DUE TO DISABILITY:**

If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (DRC). The DRC coordinates campus disability services available to students with disabilities. It is located on the corner of Rose Street and Huguelet Drive in the Multidisciplinary Science Building, Suite 407. You can reach them via phone at (859) 257-2754 and via email at [drc@uky.edu](mailto:drc@uky.edu). Their web address is <http://www.uky.edu/StudentAffairs/DisabilityResourceCenter/>.

#### **ASSIGNMENTS:**

There will be two types of assignments for this class, in addition to the quizzes and exams:

- Classroom drawing assignments will be completed during the lecture portion of the class. These drawing assignments will be based on the *Developing Spatial Thinking* workbook and will be completed and submitted in class. You will need the paper copy of this book (rather than the digital version) in order to complete and submit the workbook pages. If you do not



complete the drawing assignment in class, you may submit it no later than the following day.

- Lab drawings in AutoCAD will be completed during the lab portion of the class. These drawing assignments will be based on the *Introduction to AutoCAD 2014 for Civil Engineering Applications* text and will be completed and submitted in class. All AutoCAD drawing submittals should be printed with your name and section number in a title block. Lab drawing assignments are intended to be completed and submitted during the lab. Should you need extra time to complete a lab assignment, it should be submitted no later than the following day.

All lab drawings must be saved to a flash-drive dedicated to CE 106. At any time during the semester, the instructor may request the digital version of an assignment. If you are not able to provide the digital version, you will receive a zero (0) for the assignment.

Late assignments will be accepted only in case of a university approved excused absence; otherwise a grade of zero (0) will be given for the assignment. Make-up exams may be considered only in case of a university approved excused absence.

Any assignment or exam that is submitted for evaluation must have your name and date clearly lettered in the title block (or in the upper right-hand corner for the early assignments). This is considered to be your signature and is taken to mean that the work contained on the drawing or file is your own work and has not been copied.

#### **OTHER ITEMS:**

- Tobacco: Please note that the use of any tobacco products during the class period is not allowed.
- Phones: The class maintains a no cell phone policy. All phones need to be off during the class period and lab and cannot be used at any time.

#### **GENERAL COMMENTS:**

- Students are expected to behave in a professional manner during class.
- This is a learning lab; you are expected to explore the assignments and software during lab time. Collaboration with other students during lab is expected and encouraged; you should make exceptional efforts to self-problem-solve before asking for help.
- Cell phone use is not permitted in the lecture or lab. If you need to make a call or send a text, please do so outside the room.
- In the lab, internet use (except for sites related to this class) and game playing are not permitted. If you are finished with and have submitted your assignment, you are free to leave early.
- Students are expected to be in class at the scheduled time to receive credit for attendance.
- During lab time, you may share ideas for solving daily exercises. This is a laboratory, explore the software and learn all you can.

- There are student labs in the RGAN building (first and second floors) and in the Raymond building (second floor). There is a list of all of the labs across campus and the software programs available on the UK website.
- The Department of Civil Engineering does not have direct control of this lab, it is part of the University Student Computing Facilities. They have requested that food and drinks not be allowed in the lab.