1. General Information

1a. Submitted by the College of: EDUCATION

Date Submitted: 3/25/2013

1b. Department/Division: Educational Leadership Studies

1c. Contact Person

Name: John Nash

Email: john.nash@uky.edu

Phone: 7-7845

Responsible Faculty ID (if different from Contact)

Name:

Email:

Phone:

1d. Requested Effective Date: Specific Term/Year [1] Fall 2013

1e. Should this course be a UK Core Course?   No

2. Designation and Description of Proposed Course

2a. Will this course also be offered through Distance Learning?: Yes [4]

2b. Prefix and Number: EDL 571

2c. Full Title: Design Thinking in Education

2d. Transcript Title:

2e. Cross-listing:

2f. Meeting Patterns

LECTURE: 1.5

PRACTICUM: 1.5

2g. Grading System: Letter (A, B, C, etc.)

2h. Number of credit hours: 3

2i. Is this course repeatable for additional credit?   No

If Yes: Maximum number of credit hours:

If Yes: Will this course allow multiple registrations during the same semester?

2j. Course Description for Bulletin: This course exposes students to many facets of design thinking and provides them with an interdisciplinary perspective about the role of design in addressing the world's challenges. This course also raises awareness about the value and power of design thinking our culture. Students will work in collaborative teams on semester-long projects in collaboration with client organizations, field liaisons, and a set of multidisciplinary experts. Students are exposed to the process of human-centered design, and hone their skills in need finding, problem definition, brainstorming, prototyping, and user testing. The course will consist of lecture, hands-on practicum, and guest speakers.

2k. Prerequisites, if any: None

2l. Supplementary Teaching Component: Both

3. Will this course taught off campus?   No

     If YES, enter the off campus address:

4. Frequency of Course Offering: Summer,

     Will the course be offered every year?:   Yes

     If No, explain:

5. Are facilities and personnel necessary for the proposed new course available?:   Yes

     If No, explain:

6. What enrollment (per section per semester) may reasonably be expected?:   30

7. Anticipated Student Demand

     Will this course serve students primarily within the degree program?:   No

     Will it be of interest to a significant number of students outside the degree pgm?:   Yes

     If Yes, explain: [var7InterestExplain]

8. Check the category most applicable to this course: Not Yet Found in Many (or Any) Other Universities ,

     If No, explain:

9. Course Relationship to Program(s).

     a. Is this course part of a proposed new program?:   No

     If YES, name the proposed new program:

     b. Will this course be a new requirement for ANY program?:   No

     If YES, list affected programs:

10. Information to be Placed on Syllabus.

     a. Is the course 400G or 500?:   Yes

     b. The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if applicable, from **10.a** above) are attached: Yes

Distance Learning Form

Instructor Name: John Nash

Instructor Email: john.nash@uky.edu

Internet/Web-based: No

Interactive Video: No

Hybrid: Yes

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?   EDL 571 - Design Thinking in Education (see attached syllabus) conforms to all University of Kentucky Distance Learning Syllabus Guidleines and specifically includes information about virtual office hours, procedures for resolving technical issues, notification and information about self-disclosure and procedures for disability accommodations etc. Web-based course delivery methods will be used for 85-100% of individual student engagment and course interactions. Web based assignments described in the syllabus include: (1) Asynchronous Dialogue: Students are required to interact with their class peers on the Blackboard based discussion board; (2) Class Participation: Students are expected to attend the synchronous class meetings, actively participate in discussions and activities, and complete independent work as presented on the course calendar and, (3) Submit other assessments: Need Finding, Problem Definition, Brainstorming, Prototyping, Testing and Evaluation. Class and Web discussions are intended to facilitate critical thinking about their role as a design thinker and build their capacity to improve their working, social, and learning environments. Discussion questions and asynchronous dialogue with other students in class on the web will enhance critical thinking.

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.   The course is designed to be delivered primarily online, through synchronous and asynchronous learning technology systems. The Distance Learning experience for students enrolled in this course is based on a cohort model and will be comparable to classroom-based instruction. The web-based format aligns with effective adult learning formats and include timely access to the course instructor and peers as well as feedback on reflections and assesssment of asignments. The syllabus clearly explicates students' reading assignments including required text-based resources, research-based journal articles and book chapters. All assigments are aligned with stated course objectives (goals). Instructor-student interaction is comparable to classroom instructional methods. Student performance is assessed by the instructor through participation in and monitoring of asynchronus, on-line interactions, observations of in-class discussions, feedback on Individual Reflections (on-line), evaluation of class projects (see syllabus).

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.   When delivered primarily online this course will use University of Kentucky technology that protects the integrity of student work. The course will not require the use of examination proctors or other support staff or interactive video. The syllabus descibes UK academic policies that apply in this course and are articulated in the "Students Rights and Responsibilities Handbook" and "the UK Graduate Bulletin." Important policies and regulations applicable to this course are explicitly stated in the syllabus including attendance, cheating and plagiarism, course withdrawal, incomplete grades, and acceptable standards of English, absences, cancelled classes, changes in the syllabus, standards for assessing the quality of student work and late submittals. A statement of student responsibilities is incuded (see syllabus).

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? No.

If yes, which percentage, and which program(s)? N/A

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? All students in this primarily online course have equal access to all student services at the University of Kentucky for which they qualify and those student services are similar to those available to individuals taking this class in a tradition (i.e. face -to-face) classroom setting. Access to student services are explicated on the University of Kentucky websites including but not limited to: (http://www.uky.edu.TASC/index.php) and (http://www.uky.edu/UKIT/).Students who have special needs or require accomodations of any kind will be advised to register with the UK Disability Resource Center for assistance. The course instructor will work wit students on an individual basis to make approriate accommodations to participate in the class and complete work (see syllabus).

6.How do course requirements ensure that students make appropriate use of learning resources? In addition to purchasing required textbooks, selected readings will be available through the University of Kentucky Libraries online reserve system or posted on the course website. Additionally, the program will provide support to students encountering technology problems in accessing the course content.

7.Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program. Access is provided via students' personal computer proxy acess to online library resources (see syllabus).

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/)? Students are informed of the availability of University of Kentucky services in the syllabus (CELT, Blackboard (Bb) help desk UK IT Customer Service Center as described in the syllabus. Bb instructors have received required training in the use of the Course management System, UK Libraries online resources (and EZ Proxy tools) and will assist students as needed. As a hybrid course offering, the classroom instruction will also include overviews and demostrations (and instruction as needed) in the use of all online course tools, resources and componets. In sum, all students in this course have equal access to all student services at the University of Kentucky for which they qualify. Access to student services are explicated on the University of Kentucky websites including but not limited to: (http://www.uky.edu.TASC/index.php) and (http://www.uky.edu/UKIT/) (see syllabus).

9.Will the course be delivered via services available through the Distance Learning Program (DLP) and the Academic Technology Group (ATL)? YES

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. Students will have access to the course content via Blackboard, supported by UKIT and CELT (the TASC successors).

10.Does the syllabus contain all the required components? YES

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

    Instructor Name: John Nash

SIGNATURE|JMETT2|Joanie Ett-Mims|EDL 571 NEW Undergrad Council Review|20131016

SIGNATURE|ZNNIKO0|Roshan N Nikou|EDL 571 NEW Graduate Council Review|20131121

SIGNATURE|MYRT|Martha L Geoghegan|EDL 571 NEW College Review|20130620

Courses	Request Tracking

New Course Form

https://myuk.uky.edu/sap/bc/soap/rfc?services=

Open in full window to print or save

Generate R

Attachments:

[Browse....]   Upload File

	ID	Attachment
Delete	2392	EDL 571 Syllabus _Revised 10 7 2013.docx

[First] 1 [Last]

Select saved project to retrieve...   [   ]   Get   New

(*denotes required fields)

1. **General Information**

   a. * Submitted by the College of: EDUCATION   Submission Date: 3/25/2013

   b. * Department/Division: Educational Leadership Studies

   c.
   * Contact Person Name: John Nash   Email: john.nash@uky.edu   Phone: 7-7845

   * Responsible Faculty ID (if different from Contact)   Email: Phone:

   d. * Requested Effective Date: ○ Semester following approval OR ◉ Specific Term/Year Fall 2013

   e.
   Should this course be a UK Core Course?   ○ Yes ◉ No

   If YES, check the areas that apply:

   ☐ Inquiry - Arts & Creativity   ☐ Composition & Communications - II

   ☐ Inquiry - Humanities   ☐ Quantitative Foundations

   ☐ Inquiry - Nat/Math/Phys Sci   ☐ Statistical Inferential Reasoning

   ☐ Inquiry - Social Sciences   ☐ U.S. Citizenship, Community, Diversity

   ☐ Composition & Communications - I   ☐ Global Dynamics

2. **Designation and Description of Proposed Course.**

   a. * Will this course also be offered through Distance Learning?   ◉ Yes ○ No

   b. * Prefix and Number: EDL 571

   c. * Full Title: Design Thinking in Education

   d. Transcript Title (if full title is more than 40 characters):

   e. To be Cross-Listed [2] with (Prefix and Number):

   f. * Courses must be described by at least one of the meeting patterns below. Include number of actual contact hours[3] for each meeting pattern type.

1.5	Lecture		Laboratory[1]		Recitation		Discussion
	Indep. Study		Clinical		Colloquium	1.5	Practicum
	Research		Residency		Seminar		Studio
	Other	If Other, Please explain:					

   g. * Identify a grading system: ◉ Letter (A, B, C, etc.) ○ Pass/Fail ○ Graduate School Grade Scale

   h. * Number of credits: 3

   i. * Is this course repeatable for additional credit?   ○ Yes ◉ No
   If YES: Maximum number of credit hours:
   If YES: Will this course allow multiple registrations during the same semester? ○ Yes ○ No

j. * Course Description for Bulletin:

This course exposes students to many facets of design thinking and provides them with an interdisciplinary perspective about the role of design in addressing the world's challenges. This course also raises awareness about the value and power of design thinking our culture.

Students will work in collaborative teams on semester-long projects in collaboration with client organizations, field liaisons, and a set of multidisciplinary experts. Students are exposed to the process of human-centered design, and hone their skills in need finding, problem definition, brainstorming, prototyping, and user testing.

The course will consist of lecture, hands-on practicum, and guest speakers.

k. Prerequisites, if any:

None

l. Supplementary teaching component, if any: ◯ Community-Based Experience ◯ Service Learning ◉ Both

3. * **Will this course be taught off campus?**   ◯ Yes ◉ No

If YES, enter the off campus address:

4. **Frequency of Course Offering.**

   a. * Course will be offered (check all that apply):   ☑ Fall   ☐ Spring   ☑ Summer   ☐ Winter

   b. * Will the course be offered every year?   ◉ Yes ◯ No

      If No, explain:

5. * **Are facilities and personnel necessary for the proposed new course available?**   ◉ Yes ◯ No

If No, explain:

6. * **What enrollment (per section per semester) may reasonably be expected?**   30

7. **Anticipated Student Demand.**

   a. * Will this course serve students primarily within the degree program?   ◯ Yes ◉ No

   b. * Will it be of interest to a significant number of students outside the degree pgm?   ◉ Yes ◯ No

      If YES, explain:

This course is teaches an interdisciplinary approach to problem solving that is suitable for students across the disciplines. It has already been selected as one of the courses to be included in the entrepreneurship

8. * **Check the category most applicable to this course:**

☐ Traditional -- Offered in Corresponding Departments at Universities Elsewhere
☐ Relatively New -- Now Being Widely Established
☑ Not Yet Found in Many (or Any) Other Universities

9. **Course Relationship to Program(s).**

   a. * Is this course part of a proposed new program?   ◯ Yes ◉ No

      If YES, name the proposed new program:

   b. * Will this course be a new requirement ⁵for ANY program?   ◯ Yes ◉ No

      If YES ⁵, list affected programs::

10. **Information to be Placed on Syllabus.**

   a. * Is the course 400G or 500?   ◉ Yes ◯ No

      If YES, the *differentiation for undergraduate and graduate students must be included* in the information required in **10.b**. You must include: (i) identification of add assignments by the graduate students; and/or (ii) establishment of different grading criteria in the course for graduate students. (See SR 3.1.4.)

   b. ☑ * The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if applicable, from **10** attached.

Distance Learning Form

This form must accompany **every** submission of a new/change course form that requests distance learning delivery. This form may be required when changing a course already approved for DL fields are required!

Introduction/Definition: For the purposes of the Commission on Colleges Southern Association of Colleges and Schools accreditation review, *distance learning* is defined as a fo educational process in which the majority of the instruction (interaction between students and instructors and among students) in a course occurs when students and instructors the same place. Instruction may be synchronous or asynchronous. A distance learning (DL) course may employ correspondence study, or audio, video, or computer technologies

A number of specific requirements are listed for DL courses. The *department* proposing the change in delivery method is responsible for ensuring that the requiremer are satisfied at the individual course level. It is the responsibility of the instructor to have read and understood the university-level assurances regarding an equivalent expe students utilizing DL (available at http://www.uky.edu/USC/New/forms.htm).

Course Number and Prefix:	EDL 571	Date:	February 15, 2013
Instructor Name:	John Nash	Instructor Email:	john.nash@uky.edu

Check the method below that best reflects how the majority of the course content will be delivered.

Internet/Web-based ☐   Interactive Video ☐   Hybrid ☑

Curriculum and Instruction

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 Sy

   Syllabus Guidelines, specifically the Distance Learning Considerations?

   EDL 571 – Design Thinking in Education (see attached syllabus) conforms to all University of Kentucky Distance Learning Syllabus Guidleines and specifically includes information about virtual office hours, procedures for

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, as

   student learning outcomes, etc.

   The course is designed to be delivered primarily online, through synchronous and asynchronous learning technology systems. The Distance Learning experience for students enrolled in this course is based on a cohort model and will be

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

   policy; etc.

   When delivered primarily online this course will use University of Kentucky technology that protects the integrity of student work. The course will not require the use of examination proctors or other support staff or interactive

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 for

   defined above?

   No.

   Which percentage, and which program(s)?

   N/A

   *As a general rule, if approval of a course for DL delivery results in 50% or more of a program being delivered through DL, the effective date of the course's DL delivery w months from the date of approval.

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?

   All students in this primarily online course have equal access to all student services at the University of Kentucky for which they qualify and those student services are similar to those available to individuals taking this class in

Library and Learning Resources

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

   In addition to purchasing required textbooks, selected readings will be available through the University of Kentucky Libraries online reserve system or posted on the course website. Additionally, the program will provide support to

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

   Access is provided via students' personal computer proxy acess to online library resources (see syllabus).

Student Services

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 re

   course, such as the Information Technology Customer Service Center (http://www.uky.edu/UKIT/)?

   Students are informed of the availability of University of Kentucky services in the syllabus (CELT, Blackboard (Bb) help desk UK IT Customer Service Center as described in the syllabus. Bb instructors have received required training

9. Will the course be delivered via services available through the Distance Learning Program (DLP) and the Academic Technology Group (ATL)?

   ◉ Yes
   ○ No

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

   Students will have access to the course content via Blackboard, supported by UKIT and CELT (the TASC successors).

10. Does the syllabus contain all the required components, below? ☑ Yes

    - Instructor's *virtual* office hours, if any.

    - The technological requirements for the course.

    - Contact information for Distance Learning programs (http://www.uky.edu/DistanceLearning) and Information Technology Customer Service Center (http://www.uky.edu/UKIT/Help/; 859-218-HELP).

    - Procedure for resolving technical complaints.

    - Preferred method for reaching instructor, e.g. email, phone, text message.

    - Maximum timeframe for responding to student communications.

    - Language pertaining academic accommodations:

- "If you have a documented disability that requires academic accommodations in this course, please make your request to the University Disability Resource Center will require current disability documentation. When accommodations are approved, the Center will provide me with a Letter of Accommodation which recommended accommodations. Contact the Disability Resource Center, Jake Karnes, Director at 859-257-2754 or jkarnes@email.uky.edu."

- Specific dates of face-to-face or synchronous class meetings, if any.

- Information on Distance Learning Library Services (http://www.uky.edu/Libraries/DLLS)

  - Carla Cantagallo, DL Librarian

  - Local phone number: 859 257-0500, ext. 2171; long-distance phone number: (800) 828-0439 (option #6)

  - Email: dliservice@email.uky.edu

  - DL Interlibrary Loan Service: http://www.uky.edu/Libraries/libpage.php?lweb_id=253&llib_id=16

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

Instructor Name:

John Nash

Abbreviations: DLP = Distance Learning Programs ATG = Academic Technology Group Customer Service Center = 859-218-HELP (http://www.uky.edu/UKIT/Help)

Revised 8/09

[1] Courses are typically made effective for the semester following approval. No course will be made effective until all approvals are received.

[2] The chair of the cross-listing department must sign off on the Signature Routing Log.

[3] In general, undergraduate courses are developed on the principle that one semester hour of credit represents one hour of classroom meeting per week for a semester, exclusive of any laboratory meeting. La meeting, generally, represents at least two hours per week for a semester for one credit hour. (from SR 5.2.1)

[4] You must also submit the Distance Learning Form in order for the proposed course to be considered for DL delivery.

[5] In order to change a program, a program change form must also be submitted.

Rev 8/09

Submit as New Proposal   Save Current Changes

Course Description

This course exposes students to many facets of design thinking and provides them with an interdisciplinary perspective about the role of design in addressing the world's challenges. This course also raises awareness about the value and power of design thinking our culture.

Design Thinking in Education is a course in which students work on challenges facing the P-20 community. The class is focused on a participatory, design thinking approach, with particular attention to the needs of clients who offer real-life challenges for students to work on.

Students from several majors with different experiences will pool their disparate yet complementary knowledge and skill sets to work to iteratively design, prototype and field test solutions to a challenge posed by a client group.

Students will work in collaborative teams on semester-long projects in collaboration with client organizations, field liaisons, and a set of multidisciplinary experts. Students are exposed to the process of human-centered design, and hone their skills in need finding, problem definition, brainstorming, prototyping, and user testing.

The course will consist of hands-on labs, guest speakers, and a guided design process.

Course Goals

- To develop prototype solutions to heretofore intractable challenges in education
- To practice design thinking in a real-world context
- To learn the tenets of human-centered design
- To learn how to create hands-on prototypes
- To develop problem solving and critical thinking skills
- To recognize the potential impact of creative thinking, design thinking and innovation in the world

Course Objective

This course seeks to provide students with the skills, tools, and mindsets to enable them to discover solutions to challenges faced by educators. The techniques and skills learned during the course apply equally well to the business and social sector as they do to the education sector.

Course Structure

The learning model in this course is in large part "learning by doing." Although the assigned readings and in class discussions will provide the raw material for building your design skills and mindsets, the real learning will come in the ambiguous and uncertain challenges you will tackle in your team project. With the goal of creating solutions to client challenges, you'll develop your needfinding skills by studying users facing the challenges you'll try to solve. The project will culminate in a trade show in which your team will present either a 3-D physical prototype or perhaps a dramatization, of your solution to your users' challenge.

To supplement your project-based learning and to develop your problem-solving skills, we'll do a number or exercises in class. Most will focus on enhancing your design thinking skills, including your ability to empathize for another, conduct needfinding, defining challenges people face in context of the environment, brainstorming, prototyping, and conducting user testing and obtaining feedback. You will also work on enhancing your creative thinking abilities.

Extensive fieldwork, outside meetings and general research will need to be carried out for your projects. Effective teamwork will be essential. This course is as much about team dynamics as it is about learning to think like a designer and to solve challenges in education.

Prerequisite	None
Teacher Contact	John Nash 111 Dickey Hall john.nash@uky.edu Mobile: 650-799-6703 Skype: jbnash GChat: jbnash Twitter: jnash
Office Hours	All by appointment
Preferred Method for Contact	Email
Expected Response Time	Within 24 hours
College of Education Librarian	Brad Carrington, Education Librarian brad.carrington@uky.edu 859.257.7977
Distance Education Librarian	Carla Cantagallo, Distance Education Librarian dllservice@email.uky.edu 859.218.1240 (voice) 859.257.0505 (fax) 2-2, North Wing, William T. Young Library
Course Website	CANVAS SITE

Suggested Texts

The following are PDFs accessible from the course website:
- 2010 Bootcamp Bootleg
- Design Thinking for Educators
- IDEO Human Centered Design Field Guide
- IDEO Human Centered Design Toolkit

Cell Phones

Yes, depending on time, manner and place. Don't send and receive texts or calls during class. Do use your cell phone to take pictures during class, upload images to Google+, send a tweet about class, or use the device to capture images, sound or video that are needed for your project.

Disabilities Accommodation

The American with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protections for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides a reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please notify your instructor and contact the Disability Resource Center (Mr. Jake Karnes, jkarnes@uky.edu) 257-2754, room 2 Alumni Gym.

The course will be conducted with openness and respect to all individuals' points of view and experience. The activities and discussions will not tolerate discrimination or prejudice toward any person or group's religion, ethnicity, disability, gender, or sexual orientation.

Late Assignments

Expectations are that all assignments will be completed on time. Late assignments accepted only upon permission of instructor. A late penalty of 5-10% may apply.

Online Tools We Will Use

- GChat
- Google+ Invites
- Google+ Photo Albums
- Google+ Hangouts
- Facetime
- Meetings.io
- Canvas
- Twitter (hashtag: #dlabuky)
- Google Sites
- Text messaging

Use of Student Work

Students understand that enrollment in this course grants consent for their work to be selected for inclusion in college or departmental publications (online or in print).

Attendance

Students are expected to be on time and attend mandatory sessions. S.R. 5.2.4.2 defines the following as acceptable reasons for excused absences:

     1) serious illness;

     2) illness or death of family member;

     3) University-related trips;

     4) major religious holidays;

     5) other circumstances you find to be "reasonable cause for nonattendance."

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 for adding a class. Information regarding dates of major religious holidays may be obtained through the religious liaison, Mr. Jake Karnes (257-2754).

Excessive Absences

According to the Rules of the University Senate, those students who miss more than 20% of the class FOR ANY REASON may be dropped by the instructor from the class. This is true even if you are sick and have medical excuses. The rationale for this rule is that people who miss more than 20% are not really receiving the content of the course.

From the Rules of the University Senate, Part II, 5.2.4.2 Excused Absences: If attendance is required or serves as a criterion for a grade in a course, and if a student has excused absences in excess of one–fifth of the class contact hours for that course, a student shall have the right to petition for a "W," and the faculty member may require the student to petition for a "W" or take an "I" in the course. (US: 2/9/87; RC: 11/20/87)

Participation and Professionalism

The class requires field work in school settings. This entails both mature personal behavior and professional conduct based on the College of Education's Functional Skills and Dispositions (see Student Handbook at http://education.uky.edu/AcadServ/content/ student-handbook-education-programs). These include 1) communicating appropriately and effectively, 2) demonstrating constructive attitudes, 3) demonstrating the ability to conceptualize key content, 4) interacting appropriately with diverse groups in educational settings (including colleagues and students), and 5) demonstrating a commitment to professional ethics and behavior.

Ethics Statement

This course and its participants will not tolerate discrimination, violence, or vandalism. Education Department is an open and affirming department for all people, including those who are subjected to racial profiling, hate crimes, heterosexism, and violence. We insist that appropriate action be taken against those who perpetrate discrimination, violence, or vandalism. The University of Kentucky is an Affirmative Action and Equal Opportunity institution and affirms its dedication to non-discrimination on the basis or race, color, religion, gender, age, sexual orientation, domestic partner status, national origin, or disability in employment, programs, and services. Our commitment to non-discrimination and affirmation action embraces the entire university community including faculty, staff, and students.

All students are expected to conduct themselves in an appropriate and ethical manner during their UK classes and related field placements, as befitting students, future teachers, and ambassadors for the University of Kentucky. Any unethical behavior in class or during your field placements may result in failure for the course and/or expulsion from the the student's program, determined on a case-by-case basis. Faculty will follow all university due process procedures in cases of academic or ethical misconduct. Please consult instructors if you have questions regarding this requirement.

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.

Part II of *Student Rights and Responsibilities* (available online http://www.uky.edu/StudentAffairs/Code/part2.html) 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 the question of plagiarism involving their own 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 anything else from another source without appropriate acknowledgement of the fact, the students are guilty of plagiarism. Plagiarism includes reproducing someone else's work, whether it

be a published article, chapter of a book, a paper from a friend or some file, or something similar to this. 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 of information, the student must carefully acknowledge exactly what, where and how he/she 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 (Section 6.3.1).

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

Legal Action	Students charged with violations of criminal law will be suspended immediately from the Teacher Education Program and/or field experiences until the case is settled. Students are responsible for reporting such charges to the Program Faculty Chair.
Commitment to Diversity & Equity	This class is committed to: making diversity central to policies, decisions, and practices; evaluating progress toward diversity in the program; disseminating results widely; and using these results to strengthen diversity for the Commonwealth.

Equitable access to high quality instruction in Kentucky's schools is directly and indirectly affected by UK's College of Education program's beliefs in and support for social diversity in schools. Moreover, the Commonwealth is directly affected by the ability of its youth to acquire high levels of skill in design thinking that can then be used by them as citizens to enhance their communities and participate in the state's ongoing progress and prosperity in local, regional, national, and global contexts. Therefore, it is essential for our teacher candidates to understand issues related to social diversity and make a commitment to value diversity as they engaged in teaching, research, reflection, learning, and leadership. By valuing diversity, our program is committed to enabling and empowering all people in educational contexts regardless of their race, ethnicity, gender, social class, sexual orientation, domestic partner status, and so forth.

Commitment to Addressing the Achievement Gap	This class aligns itself with the positions of the College of Education regarding cultural and linguistic diversity in education.

Commitment to Technology	This class is committed to teaching candidates so they use technology as a personal and professional tool. Our program is guided by NCATE standards, EPSB Kentucky Teacher Standards, EPSB Themes, and UK College of Education Technology Standards as they relate to technology.
UK College of Education Professional Themes	This course will address the four themes of the conceptual framework for the UK professional education unit: research, reflection, learning, and leading. Students will be given the opportunity to review, analyze, discuss, and apply research from diverse perspectives in education, including professional scholarship and practitioner inquiry, in order to reflect on their own practices as they study, observe, and practice in P-12 school and university classrooms. Reflection will also be integrated into students' learning opportunities through the production of written essays and analyses of observation and teaching experiences to help students take advantage of the analytical and problem-solving skills that comprise critical professional reflection on one's own teaching. This course emphasizes the commitment of the professional education unit to ensure that its graduates move into their professional lives equipped for life-long learning as educators who will be active in leading colleagues in their schools, districts, and professional organizations. The ultimate goal in addressing these four themes is to produce teacher leaders who work together to improve student learning among diverse populations and improve education in Kentucky and beyond.

Course Learning Targets, Outcomes, and Assessments

This course has been designed to provide students with opportunities to acquire skills, knowledge, conceptual understanding, classroom experience, and practice teaching in their preferred content area(s). These learning targets are aligned with Senate Bill 1 expectations including, Kentucky Academic Core Standards, Assessment Literacy, College & Career Readiness, and Characteristics of Highly Effective Teaching and Learning. By the end of this course, students will have gained the following:

Learning Target/Outcome	Assessment (Formative/Summative)
Self-assess dispositions and standards related to develop personal goals for growth.	Self assessment
Demonstrate skills in knowledge of design process for innovation.	Classwork and Final Presentation

Course Components

Course readings and assessments have been selected and arranged in compliance with policies set forth by Senate Bill 1 (March 2009), Kentucky Core Academic Standards, University of Kentucky Technology Standards, the Kentucky Education Professional Standards Board (EPSB) themes of Diversity, Assessment, Literacy, and Closing the Achievement Gap, and the National Council for the Accreditation of Teacher Education Standards.

Task	Task Description
Demonstrate competence in empathy and needfinding	Develop a empathy and understanding of client issue from their point of view
Demonstrate competence in problem definition	Narrow client issue to salient problem from which a design challenge can be formed
Demonstrate competence in brainstorming and ideation	Develop an abundance of solutions to a design challenge
Demonstrate competence in prototyping	Create fast, low resolution, usable prototypes of a solution to the design challenge to show to the client for feedback
Demonstrate competence in testing and feedback integration	Test prototypes with clients and integrate feedback from their use to iterate new versions of the solution

Course Delivery

This course is designed as a face-to-face, field study course with online components.

Senate Bill 1 Initiatives

This course will provide students an opportunity to advance their knowledge and mastery of the "tools" associated with Kentucky education reform, including the Kentucky Core Academic Standards (as they become available), assessment literacy – assessment for learning, Characteristics of Highly Effective Teaching and Learning, College and Career Readiness, and the new accountability system as it becomes available. As students carry out projects and complete assignments that involve instructional activities for P-12 students in Kentucky schools, they will address one or more components of the Senate Bill 1 initiatives.

Changes

The instructor reserves the right to make adjustments/changes to the course syllabus with or without notice. Because this course is heavily dependent on the outcomes of fieldwork, some on campus meeting dates may change. Please check the course website on Canvas for the most recent announcements regarding the schedule.

Required

- A field notebook of your choosing (something you like and is easy to carry around). This may or may not be separate from whatever you would use to take notes in class.
- Several of your favorite pens or pencils with which to take notes and/or sketch (be nice to yourself)

Optional

Also useful but not required:
- Digital camera
- Digital voice recorder
- Video camera

Readings and Assignments

UNIT: Design Thinking Overview

These are the readings that you should complete to be on top of things for our first module, which we call the "Overview" module.

Please read the following:

Pages 3-16 of the Human Centered Design Toolkit;
And the following entries in the Bootcamp Bootleg for

- Empathize
- Define
- Ideate
- Prototype
- Test

Video Viewing

View the following video for this unit:

Getting People to Talk: An Ethnography & Interviewing Primer from Gabe & Kristy on Vimeo

UNIT: Need Finding, Observation & Empathy

"To acquire knowledge, one must study; but to acquire wisdom, one must observe."
--Marilyn vos Savant, American columnist

"Focus on the user and all else will follow."
-- Google mantra.

"Design thinking is a user-centered design process, and the empathy that comes from observing users enables design thinkers to uncover deep and meaningful needs (both overt & latent). Empathy, by definition, is the intellectual identification with or vicarious experiencing of the feelings, thoughts or attitudes of another.

Empathy gaining is often described as 'needfinding' in that you are discovering people's explicit and implicit needs so that you can meet those needs through design. A need is a physical, psychological or cultural requirement of an individual or group that is missing or not met through existing solutions."
https://dschool.stanford.edu/groups/k12/wiki/606dd/Process_.html

Empathy and Need Finding Reading Assignment

Read the Following:

Pages 20-46 in Human Centered Design, An Introduction

The following entries in the 2010 Bootcamp Bootleg
(sorry, this document has no page numbers for some reason):

- Assume a Beginner's Mindset
- Interview Preparation
- Interview for Empathy
- What, How, Why?
- Extreme Users
- Team Share and Capture
- Space Saturate and Group
- Empathy Map

UNIT: Definition of the User Point of View

In this phase of design thinking, students the focus is on becoming aware of peoples' needs and developing insights. The phrase "How might we...." is often used to define a point of view, which is a statement of the user + need + insight. This statement ends with a suggestion about how to make changes that will have an impact on peoples' experiences.

User Point of View Reading Assignment

Read pages 56-72 in the Human Centered Design Toolkit.

Read the following entries from the dSchool Bootcamp Bootleg

- Journey Map
- Composite Character Profile
- Fill in the Blank Character Profile
- Why-How Laddering
- Point of View Mad Lib
- Point of View Analogy
- Point of View Want Ad
- Design Principles
- How Might We...
- Stoke

UNIT: Brainstorming

"Ideating is a critical component of design thinking. Students are challenged to brainstorm a myriad of ideas and to suspend judgment. No idea is to far-fetched and no one's ideas are rejected. Ideating is all about creativity and fun. In the ideation phase, quantity is encouraged. Students may be asked to generate a hundred ideas in a single session. They become silly, savvy, risk takers, wishful thinkers and dreamers of the impossible...and the possible."
https://dschool.stanford.edu/groups/k12/wiki/606dd/Process .html

Brainstorming Reading Assignment

Readings for the Ideate and Brainstorm Module

Read pages 73-74 of the Human Centered Design Toolkit.
Read the following entries from the Bootcamp Bootleg:

- Brainstorm Rules
- Facilitate a Brainstorm
- Selection
- Bodystorming
- Impose Constraints

UNIT: Prototyping

"Prototyping is a rough and rapid portion of the design process. A prototype can be a sketch, model, or a cardboard box. It is a way to convey an idea quickly. Students learn that it is better to fail early and often as they create prototypes."
https://dschool.stanford.edu/groups/k12/wiki/606dd/Process .html

Prototyping Reading Assignment

Read pages 75-76 from the Human Centered Design Toolkit
Read the following entry from the Bootcamp Bootleg:

- Prototype for Empathy
- Prototype to Test
- Prototype to Decide

UNIT: Testing & Feedback
> "Testing is part of an iterative process that provides students with feedback. The purpose of testing is to learn what works and what doesn't, and then iterate. This means going back to your prototype and modifying it based on feedback. Testing ensures that students learn what works and what doesn't work for their users."
> https://dschool.stanford.edu/groups/k12/wiki/606dd/Process_.html

Test and Feedback Readings
Read pages 77-102 in the Human Centered Design Toolkit.
Read the following entries in the Bootcamp Bootleg:

- Feedback Capture Grid
- Testing with Users
- User Driven Prototyping
- Wizard of Oz Prototyping
- Storytelling
- Shooting Video
- I Like, I Wish, What If

MAJOR PROJECT

At the core of your course experience are the projects brought in by the community Partners. In the projects, Partners are co-designers with your student in a process of need finding, brainstorming, and rapid prototyping to create new, powerful solutions to the educational, social, policy, process, or development challenges they face. Your team will work on the projects with supports from the teaching team and a liaison from client partner. The projects establish the instructional foundation of the course to create the educational experiences for students.

Where do projects come from?

The teaching team solicits projects from the community that it thinks will be successful student projects. To be successful, a good project will commonly have the following aspects.

1. Challenge students' creative and intellectual abilities.
2. Be conceptually and technically challenging while retaining minimal cost and physical size.
3. Be of deep concern to the partners, but not on a critical policy or production path.
4. Give the relevant student learning team considerable freedom of action and decision-making authority.
5. Benefit from an open-door policy between student team, partner liaison, and knowledge and insight from partners.

How Long Are the Projects?

The projects will be carried out for a semester (approximately for 16 weeks) by student teams in DTiE, so it is critical to have a proposal with a challenging, but do-able project to be done for the designated time period.

What Students Deliver

Our partners can expect three types of deliverables throughout the semester from student teams, Prototypes, Presentations, and Documents.

Prototypes

Prototypes are main tools for design innovation and communication in the course. Starting around the second half of the course, student teams contribute their efforts to make prototypes to practice the designing process with the concepts. By creating simple, rough ideas into tangible models, the critical concepts will be improved quickly, and it stimulates students to discover different ways to advance existing ideas.

Presentations

The formal communication skill is one of essential abilities for students to develop and practice in the course. The student teams deliver presentations to the class and the partners three times during the semester. The first presentation is to show the teams' understanding of the project such as requirements, project scope, and their viewpoints regarding design challenges. For the second presentation, the teams share their process of developing concepts with emphasis on how they will improve throughout the remaining time. The final presentation delivers final prototype with the rationales behind their development and suggestions for the future.

| Documents | The student teams provide a comprehensive summary of their design process once a month to the partners. The purpose of this document is sharing the knowledge and process with the partners to let them know what the teams have accomplished and how they have proceeded designing up to that point. The final prototype is the team's best suggestion for the design challenge, and these documents are why they have decided on that one over other possible solutions. This can provide the partners the opportunity to see the process and choose other solutions if they wish. |

Major Project Website

Project teams will be required to maintain a project website using Google Sites. Requirements for this will be described in class. Delivery of the website components is expected via a set of smaller assignments as follows:

User Profile and User Need Documentation – 20 points

The following sections must be completed in your project website:

- The **Need**: What is the need your design addresses?
- Your **User**: Show the character composite and Point of View Want Ad, other user characteristics as you see fit.

Process and Solution Sections Complete – 20 points

Teams should have completed the Solution and Prototype sections of their website.

Project Website Complete – 20 points

Submit the URL of your team's documentation website. Website should have placeholders for the key components of the site (shown below). The **Team** component should be filled out with team member information:

- Your **Team**
- The **Need**: What is the need your design addresses?
- Your **User**: Show the character composite or persona for your user, describing their characteristics
- The **Process**: What was your design approach? The alternatives you considered along the way, how you evaluated them.that led to your design?
- Your **Solution**: What you decided to create. Why.
- Your **Prototype**: A picture, video, sketch, slide deck, etc. of the prototype. Remember: *Show don't tell.*
- **Lessons Learned**: What did you learn from the process.

Project Case Brief – 25 points

Team projects will be enshrined in the student portfolio section of the dLab website.

- Each team must write 100-200 words describing the project which includes
    o the problem
    o the method or design
    o the intended consequences or benefits.
    o at least one link to supplemental information about the project (for instance, a project website that's publicly viewable, a PDF of a presentation, or a video)
    o One image which will appear with the project brief text. Choose a tasteful image that best represents the project.

Team

Teams will be comprised of 4-5 students, each of whom will act as a "division" leader for different aspects of the project. The roles and responsibilities will be described in class.

Other Assignments

Other weekly work will be assigned throughout the semester via the course website. These include online discussions, readings and viewings.

Grading Scale and Graduate Student Expectations

Graduate students in the course are held to the following expectations beyond those for undergraduates:

Grading scale for undergraduates:
90-100% = A
80-89% = B
70-79% = C
60-69% = D
<60% = E

Grading scale for graduate students (no D for Grad Students):
92-100% = A
82-91% = B
72-81% = C
<72% = E

Midterm Grades: Midterm grades will be submitted for each student. The midterm will be posted in myUK by the deadline established by the Academic Calendar.

Readings and Resources

Other texts may be assigned from this resource list:

21 principles for innovating in the real world from IDEO's Diego Rodriguez. (n.d.).The Next Web. Retrieved from http://thenextweb.com/dd/2011/05/08/21-principles-for-innovating-in-the-real-world-from-ideos-diego-rodriguez/

A Crash Course in Innovation. (n.d.).Edutopia. Retrieved from http://www.edutopia.org/blog/innovation-crash-course-suzie-boss

Bosch, P. (n.d.). What Starbucks Taught Us About Redesigning College Campuses. Co.Design. Retrieved from http://www.fastcodesign.com/1663380/what-starbucks-taught-us-about-redesigning-college-campuses

Brown, T. (n.d.). Innovation Through Design Thinking. Cambridge, MA. Retrieved from http://video.mit.edu/watch/innovation-through-design-thinking-9138/

IDEO: Big Innovation Lives Right on the Edge of Ridiculous Ideas. (n.d.).The 99% by Behance. Retrieved from http://the99percent.com/articles/7080/IDEO-Big-Innovation-Lives-Right-on-the-Edge-of-Ridiculous-Ideas

Interview with Frank Gehry. (n.d.).ArchDaily. Retrieved from http://www.archdaily.com/129680/interview-with-frank-gehry/

Kolko, J. (2012). Wicked Problems: Problems Worth Solving (1st ed.). Austin, TX: Austin Center for Design. Retrieved from https://wickedproblems.com/read.php

Leichter, F. (n.d.). How Fidelity Used Design Thinking to Perfect Its Website. Harvard Business Review. Retrieved May 7, 2012, from http://blogs.hbr.org/cs/2011/05/how_fidelity_used_design_think.html

McCracken, G. (2010, December 17). Square Inch Anthropology. Grant McCracken. Blog. Retrieved May 7, 2012, from http://cultureby.com/2010/12/square-inch-anthropology.html

Methods | Usability Body of Knowledge. (n.d.). Retrieved May 7, 2012, from http://www.usabilitybok.org/methods

Need Finding for Teen Issues. (n.d.).Ed 196/396 (Winter 2011). Retrieved May 7, 2012, from http://learncasually2011.posterous.com/need-finding-for-teen-issues

Patnaik, D., & Becker, R. (n.d.). Needfinding: The Why and How of Uncovering People's Needs. Retrieved May 7, 2012, from http://www.jumpassociates.com/needfinding-the-why-and-how-of-uncovering-people%E2%80%99s-needs.html

Ready Set Design. (n.d.). Retrieved from http://cdn.cooperhewitt.org/2011/09/02/Ready%20Set%20Design%20vX.pdf

Schiller, M. (n.d.). hyperempowered: "Surprise and Delight" and Social Networking. Retrieved May 7, 2012, from

http://www.hyperempowered.com/2007/04/the_importance_.html

Seelig, T. (2009, July 26). CreativityRulz: Brainstorming Rules: What TO DO and What NOT TO DO... CreativityRulz. Retrieved from http://creativityrulz.blogspot.com/2009/07/brainstorming-rules-what-to-do-and-what.html?m=1

Speicher, S. (n.d.). Everything is designed, even learning experiences. Retrieved May 7, 2012, from http://www.enterprisingschools.com/blogs/everything-designed-even-learning-experiences

Strom, S. (2010, August 16). In Twist, Nonprofits Honor Technology's Failures. The New York Times. Retrieved from http://www.nytimes.com/2010/08/17/technology/17fail.html

Tan, L., & Szebeko, D. (2009). Co-Designing for Dementia. Australasian Medical Journal, 2(12). doi:10.4066/amj.v2i12.97

TEDxMontrealQuartierLatin - Lauren Tan - Co-designing for dementia. (2010). Retrieved from http://www.youtube.com/watch?v=hMFJYTmR0x0&feature=youtube_gdata_player

Tool, K. (n.d.). Design Thinking and Three Ways to Improve Our Observation Skills. Design Due. Retrieved from http://designdue.wordpress.com/2011/03/28/design-thinking-and-three-ways-to-improve-our-observation-skills/

TSA Checkpoint Evolution. (n.d.). Retrieved May 7, 2012, from http://www.ideo.com/work/tsa-checkpoint-evolution/

Walters, H. (n.d.). Ryan Jacoby: The Seven Deadly Sins of Innovation. Helen Walters: Writer, Editor. Retrieved from http://helenwalters.com/2011/02/08/ryan-jacoby-the-seven-deadly-sins-of-innovation/

Young, G. (n.d.). Grant Young: Design Thinking for Social Innovation. YouTube. Retrieved May 7, 2012, from http://www.youtube.com/watch?v=_QULmSSdsrQ