



This form should be used to add a new course or update an existing course.
This information will be used to update the course catalog.

| | | | | |
|--|--|--|--|--|
| Name of person completing form: Peter Taylor | | Date: 8/28/14 | College File # (to be added after Dean's approval): | |
| SECTION A – COURSE INFORMATION | | | | |
| Please complete the following: | | | | |
| <input type="checkbox"/> Course Addition | <input type="checkbox"/> Distribution | *Course Credits 3 | | |
| <input checked="" type="checkbox"/> Course Change | <input type="checkbox"/> Diversity / Int'l Mgmt | If changing, previous credits: | | |
| <input type="checkbox"/> Reactivate Course** | <input type="checkbox"/> Seminar (FYS / IS) | UC Non-Credit Course? <input type="checkbox"/> | | |
| | <input type="checkbox"/> Quantitative Reasoning | | | |
| UC Program: | | UC CEUs/PDPs: | #CEUs | |
| | | | #PDPs | |
| *Department | Critical & Creative Thinking | *Variable Course Credit: | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| *Course Number: | 652 | *Minimum Credits: | | |
| If changing, previous number: | | *Term in which this will take effect: | Spring 2015 | *Maximum Credits: |
| *Short Course Title: (Max 30 characters) | Conceptual Change | | | |
| *Long Course Title: (Max 100 characters) | Conceptual Change and Learning | | | |
| If changing, previous title: | Children and Science | | | |
| Course Description: | This course explores the ways children and adults think about their natural and social world and how that affects their learning. It is particularly concerned with identifying and describing the organized conceptual frameworks children have prior to instruction (which typically are different from the scientists' or researchers' conceptualizations) and with understanding the general processes by which conceptual frameworks can be changed. One important question concerns the ways in which children are fundamentally different learners and thinkers from adults and the ways in which they are fundamentally similar. | | | |
| If changing, previous description: | This course explores the ways children think about their natural and social world and how they affect their learning of science. It is particularly concerned with identifying and describing the organized conceptual frameworks children have prior to instruction (which typically are different from the scientists' conceptualizations) and with understanding the general processes by which conceptual frameworks can be changed. One important question concerns the ways in which children are fundamentally different learners and thinkers from adults and the ways in which they are fundamentally similar. | | | |
| Requisites (Please List All): | If changes are being requested to co/prerequisites, please explain: | | | |
| | Course Number | | Course Number | |
| <input type="checkbox"/> Pre <input type="checkbox"/> Co | _____ | AND | <input type="checkbox"/> Pre <input type="checkbox"/> Co | _____ AND |
| <input type="checkbox"/> Pre <input type="checkbox"/> Co | _____ | AND | <input type="checkbox"/> Pre <input type="checkbox"/> Co | _____ AND |
| <input type="checkbox"/> Pre <input type="checkbox"/> Co | _____ | OR | <input type="checkbox"/> Pre <input type="checkbox"/> Co | _____ |



| | |
|------------------------------------|--|
| Rationale for the Proposal: | The two minor changes in the description convey that the ideas about conceptual change covered in the course apply to research-based knowledge, not only natural science. The new title is a more accurate and informative descriptor of the emphasis of the course. |
| Other Information: | This proposal is submitted as a minor change in the course title and description. |

** "Reactivate Course" is intended to be used for courses that already exist but have been inactivated because they were not scheduled for five years or more. Departments wishing to reactivate such existing courses should send this form (including any minor changes in course description or title) and an updated syllabus to the Dean of their College. If the course is changing substantially, it should be submitted as a Course Change instead, following the normal governance process.



Course Addition/Course Change Form

Form Legend
Asterisks indicate PeopleSoft Required Fields

Course Offering Details (Please complete all of the following):

*Course College (Academic Group): CAPS
 *Course Department/Program (Subject) Critical & Creative Thinking
 *Academic Career UGRD GRAD NON-CREDIT
 Is Course Cross Listed? Yes No

If Course is Cross Listed, Complete the following:

*Course College (Academic Group): College of Liberal Arts Please note: cross listed courses should carry the same number in each cross listing department if at all possible.
 *Course Department (Subject) Psych
 *Course Number (Catalog Number) 552
 *Cross Listed Career UGRD GRAD NON-CREDIT

If course is cross-listed in more than two departments, please list additional departments and course numbers here:

SECTION B – COURSE REQUIREMENTS

Course Requirements (Undergraduate Courses):

*Does this course fulfill a General Education Requirement? Yes No **Note! If this is a NEW course, a separate request must be submitted for entry into Diversity, Quantitative Reasoning, or Distribution categories.**
 If Yes, please indicate the specific General Education Requirement. None
 If this course is being submitted for Distribution, choose an area. None
 If this course is being submitted for Diversity, choose an area. None
 *Is this course a College of Management International Mgmt course? Yes No
 *Does this course fulfill a Major Requirement? Yes No
 If Yes, in what Major?

Course Requirements (Graduate Courses):

Is this course a Requirement? Elective?
 Is this course for a Doctoral program? Master's program? Graduate Certificate? CAGS?
 What student population will be served by this course?
 % Undergrad % Master's 90 % Certificate 5 % Doctoral 5

Other Course Information (Undergraduate and Graduate Courses):

Is this course intended to be offered on-line? Yes No **If yes, please consider the relevant Supplementary Information (see addendum)**
 Has this course been offered as a Special Topics course? Yes No **If yes, when?**



| SECTION C – OTHER COURSE INFORMATION | | | | | |
|--|---|-------------|--|---|--|
| Course Components (Please Check all that Apply): | | Hours/Week? | Indicate the grading status of each component: | | Default Grading Basis (Please Check ONE ONLY): |
| Component | Primary? | | Graded? | | |
| <input type="checkbox"/> Lecture | <input type="checkbox"/> Yes <input type="checkbox"/> No | | Graded? | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input checked="" type="checkbox"/> Graded |
| <input type="checkbox"/> Laboratory | <input type="checkbox"/> Yes <input type="checkbox"/> No | | Graded? | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Pass/Fail Only |
| <input checked="" type="checkbox"/> Discussion | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | | Graded? | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Non Graded |
| <input type="checkbox"/> Indep Study | <input type="checkbox"/> Yes <input type="checkbox"/> No | | Graded? | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Audit |
| <input checked="" type="checkbox"/> Field Studies | <input type="checkbox"/> Yes <input type="checkbox"/> No | | Graded? | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Multi-Term ("Y") |
| <input type="checkbox"/> Grad Research | <input type="checkbox"/> Yes <input type="checkbox"/> No | | Graded? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Sat/UnSat |
| <input type="checkbox"/> Clinical | <input type="checkbox"/> Yes <input type="checkbox"/> No | | Graded? | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Competency |
| <input type="checkbox"/> Practicum | <input type="checkbox"/> Yes <input type="checkbox"/> No | | Graded? | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Credit/No Credit |
| <input type="checkbox"/> Seminar | <input type="checkbox"/> Yes <input type="checkbox"/> No | | Graded? | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Student Option |
| <input type="checkbox"/> Special Topics | <input type="checkbox"/> Yes <input type="checkbox"/> No | | Graded? | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Studio | <input type="checkbox"/> Yes <input type="checkbox"/> No | | Graded? | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Course Repeat Details | | | | | |
| Is Course Repeatable for Credit? | | | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | Please Note: If a course is repeatable for credit, it cannot have Distribution status. |
| Is a student allowed to enroll multiple times in a single term? | | | <input type="checkbox"/> Yes | <input type="checkbox"/> No | |
| Total Units Allowed (If Course can be Repeated for Credit) | | _____ | | | |
| Total Completions Allowed (If Course can be Repeated for Credit) | | _____ | | | |
| For Registrar's Use Only | | Course ID: | Course Entered By: | | |



SECTION E – SUPPLEMENTARY INFORMATION (DO NOT COPY WHEN SUBMITTING HARD COPY)

Signatures Required (Please note: if more than one department or college is involved, be sure to get all relevant signatures)

| | |
|---|--|
| New or Amended UNDERGRADUATE course | Department Chair, Chair of Collegiate Committee, Chair of Collegiate Senate or governing body, College Dean, Provost |
| New or Amended GRADUATE course | GPD, Department Chair, Chair of Collegiate Committee (if needed), PECC (if needed), College Dean, FC Grad Studies Committee Chair, Graduate Dean, FC Chair, Provost |
| First-Year or Intermediate Seminar, Quantitative Reasoning | Department Chair, Chair of Collegiate Committee, Chair of Collegiate Senate, College Dean, FC Subcommittee Chair, FC GenEd Committee Chair, AVP for Undergraduate Studies, FC Chair, Provost |
| Distribution Status | Department Chair, FC Subcommittee Chair, FC GenEd Committee Chair, AVP for Undergraduate Studies, FC Chair, Provost |
| Diversity Status | Department Chair, Diversity Chair, AAC Chair, Chair of Collegiate Senate, College Dean, Provost |

Supplementary Information Required

| | |
|--|---|
| 1 If this is a NEW course, please attach: | <ul style="list-style-type: none"> a. A description of the reasons behind the proposal (how will the new course fit into the curriculum? What are the goals of the new course?) b. An indication of how the course serves students (its relationship to graduate, preprofessional or vocational objectives, and how it relates to other existing courses). c. A detailed syllabus, including principal topics covered in the course, an evaluation statement indicating ways in which you will evaluate students' progress, and a brief bibliography. Please also include on the syllabus the following: a statement about accommodations for students with disabilities, and a statement regarding academic dishonesty and misconduct. (Sample statements are available upon request from the CLA/CSM Academic Affairs Committee.) |
| 2 If this is an AMENDED course, please attach: | <ul style="list-style-type: none"> a. A description of the reasons behind the proposal. b. An indication of how the course serves students (its relationship to graduate, preprofessional or vocational objectives, and how it relates to other existing courses). |
| 3 If this is an ONLINE course, please consider:¹ | <p>Recommended additional elements in syllabi for online course proposals:</p> <p>Instructor office hours: provide multiple options for students to contact instructor, e.g., face-to-face, telephone, e-mail, etc. Instructor bio recommended.</p> <p>Course description and course policies: include role of technology in the course, how the course is delivered, and whether this has the same pedagogical effect.</p> <p>Course objectives: include technology objectives if any.</p> <p>Prerequisites and required hardware, software, connectivity: include technology skill prerequisites. Include software, plug-ins, hardware, connection and browser requirements.</p> <p>Grading policies and academic dishonesty: indicate grading strategies that will prevent student cheating. Communicate university policies for dealing with academic dishonesty.</p> <p>Group participation policies: Include clear expectations for group work and mechanisms and resources for monitoring.</p> <p>General syllabus and course calendar: include major topics, reading assignments, due</p> |



dates, and exams. Organize by week.

Attendance, participation, and absenteeism: include expectations for student participation. Define absenteeism and establish expectations for student compliance.

Exams: include procedures for exams in a controlled environment in accordance with university policies.

E-mail procedures: establish expectations for the manner in which students are to identify themselves in e-mail messages.

Campus presence: indicate when students must attend classes, labs, exams, advising sessions, and other events on campus or at other locations.

¹ Adapted from Moore, G.; Winograd, K.; Lange, D. (2003). *You Can Teach Online: Building a Creative Learning Environment*. New York: McGraw Hill Custom Publishing. Unit 2, Lesson 9.17.

The following apply to UNDERGRADUATE courses only:

4 If this course is being submitted as a First-Year or Intermediate SEMINAR, please attach:

- a. If the course is a FYS that will be counted towards the major/minor, please explain the rationale for granting major/minor credit.
- b. Will the department/program also offer a non-GenEd version of this course? If so, please indicate the title and course number. Be sure also to indicate clearly on course syllabi and other informational materials which course duplicates this seminar and may not be taken in addition to it.
- c. General seminar information: please include a paragraph near the beginning of the syllabus that tells students what the goals of the seminar are. Eligibility for entrance into an FYS or IS must be included in the syllabus. For First year Seminars, mention that there will be a mentor and an advisor attached to the course. Please emphasize that the FYS is 4 credits and incorporate the 4th hour into your class plans as a regular part of the course, not an add-on labeled the "fourth hour". See sample seminar boilerplates available from the chair of the Seminars Assessment Committee related to all of this information.
- d. Questionnaire or statement indicating how and where you plan to address the GenEd Capabilities and assess student progress. You may use the Questionnaire distributed by the Seminars Assessment Committee or write a narrative using the guidelines for capabilities provided below. Intermediate Seminars must address at least three capabilities—Careful Reading, Clear Writing, and Critical Thinking. First Year Seminars must address those three plus Information Technology, Oral Presentation, Teamwork, and Academic Self Assessment.
- e. Sample assignments, indicating which capabilities they are designed to address. Among sample assignments, the Seminars Assessment Committee especially needs to see any assignments related to 5-page WPE-type papers.
- f. In designing your course and preparing your proposal, you should refer to the following documents: "The General Education Capabilities Statements" (1997-98; Blue Document) and the "Guidelines for Level of Attention to Capabilities in First Year and Sophomore/Junior Seminars" (August 2002, Green Document). A description of the Mentor component is also available from the First Year Seminar Coordinator for those designing First Year Seminars.



5 If this course is being submitted for DISTRIBUTION status, please attach (each as a separate section):

- 1. Provide a rationale for inclusion in the proposed distribution area. How does the content of the course fit the definition and criteria of the proposed distribution area?
2. Indicate whether students will have the opportunity to write a paper suitable for the Writing Proficiency Requirement Portfolio...
3. Indicate which of the GenEd Capabilities will be covered in your course...
4. Discuss the pedagogical methods, assignments, or class activities that will be used to ensure coverage of the area criteria...
5. Syllabus: please include a paragraph near the beginning of the syllabus that tells students what the goals of the course are...
6. Provide a set of sample assignments, indicating which GenEd capabilities they are designed to address.

6 If this course is being submitted for QUANTITATIVE REASONING status, please attach:

- List the mathematical topics that this course will cover (required topics include: descriptive statistics, linear models, exponential models or probability, and the use of technology...
Educational principles: Explain how this course imbeds the following basic principles of general education courses.
In particular, explain how this course will provide students with the opportunity to develop and demonstrate the capacity to:
On a separate sheet, explain how student capabilities will be assessed in this course.
Furnish a course bibliography.



7 If this course is being submitted for DIVERSITY status, please attach:

Indicate which of the elements of diversity will be covered in your course (at least two must be incorporated as an integral part of the course): Race, Gender, Class, Culture, Sexual Orientation, Age, and Disability.

Provide a summary of how the course handles diversity as a central theme.

Are there any particular pedagogical strategies that you use that explain how you handle diversity in your course? If so, please discuss any relevant teaching techniques, lecturing strategies, writing assignments, group work, films, etc.

General Notes: Diversity courses may be offered in all areas and at all levels of the curriculum, and may use a variety of disciplinary and theoretical approaches. Courses can have either a US or more inclusive international focus (including courses that compare the US to other nations or world regions).

If a proposed course is multi-sectioned, the department must agree to designate all sections as diversity courses, or else to separate diversity sections into a new course. Any course must have already achieved full governance approval as a regular academic offering before it can be considered for designation as a diversity course.

END OF FORM



| SECTION D - SIGNATURES | | |
|--|-------------------------------|---|
| Department: CrCrTh | Number: 652 | Course Title: Conceptual Change and Learning |
| Approval Signature GPD | <i>Peter Taylor</i> | Printed Name Peter Taylor Approval Date 8/28/14 |
| Approval Signature Department Chair | <i>[Signature]</i> | Printed Name Dennis Murphy Approval Date 11/3/14 |
| Approval Signature Collegiate Committee | | Printed Name Approval Date |
| Approval Signature Collegiate Committee | | Printed Name Approval Date |
| Approval Signature College Senate Chair | | Printed Name Approval Date |
| Approval Signature College Dean | <i>[Signature]</i> 11/3/14 | Printed Name PHILIP D. SALVO Approval Date 11/3/14 |
| Approval Signature PECC (if relevant) | | Printed Name Approval Date |
| Approval Signature FC Subcommittee | | Printed Name Approval Date |
| Approval Signature FC Committee | | Printed Name Approval Date |
| Approval Signature AVP Undergrad. Studies | | Printed Name Approval Date |
| Approval Signature Graduate Dean | | Printed Name Approval Date |
| Approval Signature Chair, Faculty Council | | Printed Name Approval Date |
| Approval Signature Provost | | Printed Name Approval Date |