

University of Cincinnati Translational Science Curriculum

In conjunction with the Center for Clinical & Translational Science & Training (CCTST)
Spring 2019

COURSE TITLE: Collaboration & Team Science

COURSE: BE-7040

CREDIT HOURS: 2 credits

ROOM: Medical Sciences Building (MSB) 3352

(Some sessions will be held in conjunction with larger workshops. The room will be different but the time will be the same.)

TIME: 10:00 AM – 12:00 PM

COURSE DESCRIPTION: This course provides an overview of the Science of Team Science (SciTS) for investigators who are (or will be) engaged in translational research and will be working in teams. In addition to examining the theoretical and research literature on the dynamics of small groups, the course will include an examination of the construction and maintenance of high functioning teams. Tools and exercises for assessing and improving team skills will provide hands-on experiences for learners. Each class session will be divided into two parts: 1) an exploration of a particular topic related to teams, team functioning, and team science, and 2) a discussion of one or more cases in which class members function as a consulting team in order to assess the case scenario and to develop recommendations for corrective action.

COURSE DIRECTOR: John R. Kues, PhD, Associate Dean for Continuous Professional Development (UC College of Medicine), Director of the Center for Improvement Science (a core service of the CCTST), Professor Emeritus, Department of Family and Community Medicine (University of Cincinnati).
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LEARNING OBJECTIVES:

1. Understand the basic concepts of team science including terminology and application to research.
2. Demonstrate ability to use tools to assess and improve research teams.
3. Apply team science concepts to the development and operation of high functioning research teams.

GRADING/EVALUATION: This is a pass/fail course. Students are expected to attend at least 80% of the classes. There is also an expectation that each student comes to class prepared (having read or completed any assignments) prior to class. The students will be expected to participate in class discussions and problem-solving/case discussions.

READINGS: There will be weekly reading assignments and periodically there may be other materials that need to be completed prior to class.

ACADEMIC INTEGRITY: The University of Cincinnati has clear policies regarding academic dishonesty, including plagiarism and research misconduct. It is your responsibility to follow the guidelines outlined in the Student Code of Conduct.

From the University of Cincinnati's Graduate Student Handbook:

"Academic dishonesty in any form is a serious offense that cannot be tolerated in an academic community. Dishonesty—including cheating, plagiarism, deception of effort, and/or unauthorized assistance—may result in a failing grade in a course and/or suspension or dismissal from the university. The Student Code of Conduct defines behavior expected of all University of Cincinnati students. It is each student's responsibility to know and comply with the University's Student Code of Conduct. Disciplinary procedures are explained in a step-by-step manner, and the procedures for appeal of decisions are stated."

For the full text, go to: Student Code of Conduct (www.uc.edu/conduct/Code_of_Conduct.html) or Graduate Handbook (<http://grad.uc.edu/content/dam/grad/docs/Publications/handbook.pdf>).

SNOW/EMERGENCY DAY POLICY: UC may close one or more campuses as needed due to severe winter weather. A closure may affect one or more of our campuses, and may be for an entire day, or part of a day. University closings are announced to all students and employees through multiple methods:

- emergency email
- via web at www.uc.edu
- text message to everyone who has signed up to receive emergency messages
- recording on the campus status line at (513) 556-3333
- recording at the main campus number at (513) 556-6000
- via most Cincinnati broadcast news media

IF there is a closure during our regular class meeting time, we will NOT meet for class that day.

COURSE SCHEDULE:

Week	Date	Topic	Reading/Assignments
1	1/18	A Brief History of Science	<ul style="list-style-type: none"> • Singh J, Fleming L. Lone inventors as source of breakthroughs: Myth or reality? <i>Management Science</i> 2010; 56, 41-56. • Wuchty S, Jones BF, Uzzi B. The increasing dominance of teams in production of knowledge. <i>Science</i> 2007; 316, 1036-9. • Feinberg M, Willer R, Schultz M. Gossip and ostracism promote cooperation in groups. <i>Psychological Science</i> 2014; 25(3), 656-664.
2	1/25	Assessing readiness to collaborate	<ul style="list-style-type: none"> • Hall KL, Stokols D, Moser RP, et al. The collaboration readiness of transdisciplinary research teams and centers: Findings from the National Cancer Institute's TREC year-one evaluation study. <i>American Journal of Preventive Medicine</i> 2008; 35(2S), S161-S172. • Complete the Self-Assessment (on Blackboard).
3	2/1	Creating and assembling teams	<ul style="list-style-type: none"> • Post C, DeLia E, DiTomaso N, Tirpak T, Borwankar R. Capitalizing on thought diversity for innovation. <i>Research-Technology Management</i> 2009; 52(6), 14-25. • Lungeanu A, Huang Y, Contractor NS. Understanding the assembly of interdisciplinary teams and its impact on performance. <i>Journal of Informetrics</i> 2014; 8(1), 59-70.
4	2/8	Collaboration and collaborative research: a primer	<ul style="list-style-type: none"> • Disis ML, Slattery JT. The road we must take: Multidisciplinary team science. <i>Science Translational Medicine</i> 2010; 2(22), • Hiatt RA, Breen N. The social determinants of cancer: a challenge for transdisciplinary science. <i>American Journal of Preventive Medicine</i> 2008; 35(2S), S141-S150. • Syme, SL. The science of team science: Assessing the value of transdisciplinary research. <i>American Journal of Preventive Medicine</i> 2008; 35(2S), S94-5.
5	2/15	The natural evolution of teams	<ul style="list-style-type: none"> • B W Tuckman (1965), 'Developmental Sequence in Small Groups', <i>Psychological Bulletin</i> 63. • Forming, Storming, Norming, and Performing – From MindTools.pdf • Bruce_tuckman_s_stages_of_team_development_.pdf
6	2/22	Functions and Dysfunctions of a Team	<ul style="list-style-type: none"> • Lencioni, Patrick. <i>The FIVE Dysfunctions of a Team</i>. Jossey Bass: San Francisco, 2002.
7	3/1	Managing Team Conflict: Understanding Individual Styles	<ul style="list-style-type: none"> • <i>Complete DiSC®</i>

8	3/8	Team effectiveness: Communication and other key features	<ul style="list-style-type: none"> Enhancing the Effectiveness of Team Science (Report from the National Academies Press) 2015. Available in pdf: https://www.nap.edu/catalog/19007/enhancing-the-effectiveness-of-team-science) (280 pages total – need to select excerpts) Complete the Communication Styles Survey found in Blackboard.
9	3/15	Managing Teams: Leadership and Management	<ul style="list-style-type: none"> Gray, B. Enhancing transdisciplinary research through collaborative leadership. American Journal of Preventive Medicine 2008; 35(2S), S124-132. Masse LC, Moser RP, Stokols D, Taylor BK, Marcus SE, Morgan GD, Hall KL, Croyle RT, Trochim WM. Measuring collaboration and transdisciplinary integration in team science. American Journal of Preventive Medicine 2008; 35(2S), S151-160. Complete Leadership Style survey found in Blackboard.
	3/22	SPRING BREAK	<ul style="list-style-type: none"> NO CLASS
10	3/29	Communication and Teams	<ul style="list-style-type: none"> Conducted in conjunction with a larger workshop.
11	4/5	Multi-site Collaboration: Virtual Teams	<ul style="list-style-type: none"> Sargeant J, Loney E, Murphy G. Effective interprofessional teams: “Contact is not enough” to build a team. Journal of Continuing Education in the Health Professions 2008; 28, 228-234. AAMC Report: Challenges and Opportunities for New Collaborative Science: https://www.aamc.org/download/121174/data/rtfreport-color.pdf.pdf. (selected excerpts)
12	4/12	Learning and practicing tools and skills: Appreciative Inquiry and Team Charters	<ul style="list-style-type: none"> In conjunction with a larger workshop
13	4/19	Writing and managing grants as a Team	<ul style="list-style-type: none"> TBA
14	4/26	Networks and Networking: Network Theory and Social Network Analysis	<ul style="list-style-type: none"> TBA

15 Finals Week	5/3	Institutional issues for team science: Design and environment (Optional)	<ul style="list-style-type: none">• Enhancing the Effectiveness of Team Science (Report from the National Academies Press) 2015. Available in pdf: https://www.nap.edu/catalog/19007/enhancing-the-effectiveness-of-team-science (chapter 8: Institutional and Organizational Support for Team Science)• Stokols D, Misra S, Moser RP, Hall KL, Taylor BK. The ecology of team science: Understanding contextual influences on transdisciplinary collaboration. American Journal of Preventive Medicine 2008; 35(2S), S96-115.
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