M19-559 - Dissemination and Implementation Science

Spring 2019

**Time/Place:** Wednesdays – 1-4  
Location: Julius Richmond Room (TAB)

**Instructors:** Rachel Tabak, many guest experts

**Office hours:** By appointment  
rtabak@wustl.edu

**Target audience:** Researchers in clinical and population sciences; clinical training program participants; MSPH, MPH, and MSW students; prior research experience is helpful but not required.

**Prerequisites:** None

**Credits:** 3

**Course overview**

**Description:** This course provides an introduction to dissemination and implementation (D&I) science (i.e., translational research in health). Topics include the importance and language of D&I science; designs, methods, and measures; differences and similarities across clinical, public health, and policy settings; selected tools for D&I research and practice; and future issues.

**Evaluation:** Students will design a research/practice project in dissemination and implementation research, create a poster, and answer questions related to their project. Researchers might analyze a data set or develop a grant application. Practitioners might conduct a D&I project to improve patient care or population health.

**Competencies:**

1. Understand the importance and language of D&I science.
2. Explore the theories and frameworks that are commonly used in D&I research and practice.
3. Describe the importance of context at multiple levels in D&I science
4. Distinguish between implementation strategies and outcomes and those in efficacy and effectiveness research
5. Describe various study designs, methods, and measures that support D&I science.
6. Understand D&I methods and challenges across various settings and populations.
7. Recognize opportunities to apply D&I science to intervention development and evaluation.
8. Explore the importance of systems and partnerships in D&I.
9. Understand how D&I science can further your research/practice plans and career.

Course format and requirements

Students are expected to attend all classes. Readings assigned for each class should be read ahead of time and students should be prepared to discuss readings in class and to be active participants in the learning process.


*Note:* the library is currently obtaining the e-version of the textbook. They have hard copies currently available. If you have difficulty obtaining the book, let one of the instructors know.

**Grading and assignments:** One class assignment that involves development of a D&I research project, presented as a poster. Active participation in class.

**Grading scale:**

- **A** 95-100%
- **A-** 90-94.9%
- **B+** 85-89.9%
- **B** 80-84.9%
- **B-** 75-79.9%
- **C+** 70-74.9%
- **C** 60-69.9%

Accommodations based upon sexual assault: The University is committed to offering reasonable academic accommodations to students who are victims of sexual assault. Depending on the specific nature of the allegation, such measures may include but are not limited to: implementation of a no-contact order, course/classroom assignment changes, and other academic support services and accommodations. If you need to request such accommodations, please direct your request to Kim Webb (kim_webb@wustl.edu), Director of the Relationship and Sexual Violence Prevention Center. Ms. Webb is a confidential resource; however, requests for accommodations will be shared with the appropriate University administration and faculty. The University will maintain as confidential any accommodations or protective measures provided to an individual student so long as it does not impair the ability to provide such measures.
Bias Reporting: The University has a process through which students, faculty, staff and community members who have experienced or witnessed incidents of bias, prejudice or discrimination against a student can report their experiences to the University’s Bias Report and Support System (BRSS) team. See: diversityinclusion.wustl.edu/brss/

Mental Health: Mental Health Services’ professional staff members work with students to resolve personal and interpersonal difficulties, many of which can affect the academic experience. These include conflicts with or worry about friends or family, concerns about eating or drinking patterns, and feelings of anxiety and depression. See: shs.wustl.edu/MentalHealth
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<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Readings</th>
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<tbody>
<tr>
<td>Class 3</td>
<td>January 30</td>
<td><strong>Theories and frameworks in D&amp;I research</strong></td>
<td><strong>Core:</strong>&lt;br&gt;Ch. 3. Dearing JW. Historical roots of dissemination and implementation science.&lt;br&gt;Ch. 5. Tabak RT. The Conceptual Basis for Dissemination and Implementation Research: Lessons from Existing Models and Frameworks</td>
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**Additional:**  
|  |  | D&I → multi-level (provider and organization level factors, Policy) Clinical D&I research | **Core:**  
Ch. 28: Purtle., Policy Dissemination Research  
**Additional:** |
| Class 5 | February 13 | Implementation strategies | **Core:**  
Ch. 15. Implementation Strategies  
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<td>Class 8</td>
<td>March 6</td>
<td>Measurement issues</td>
<td>Core:</td>
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| Class 9 | March 13 | Mixed methods | **Core:**  
**Additional:**  
| Class 10 | March 20 | Adaptation/fidelity Disparities | **Core:**  
Ch. 16. Fidelity and Its Relationship to Implementation Effectiveness, Adaptation, and Dissemination  
Ch. 17. Baumann A. Adaptation in Dissemination and Implementation Science |

**Additional:**

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<th>Class 11</th>
<th>March 27</th>
<th>Designing for dissemination, impact and sustainability D&amp;I opportunities</th>
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**Core:**

**Additional:**
| Class 13 | April 3 | Global Low-resource settings Non-Health settings | **Core:**  
Ch. 28. Lobb, R. Dissemination and Implementation Research in a Global Context.  
Ch. 21. Vinson, CA. Dissemination and Implementation Research in Community and Public Health Settings.  
Ch. 22. McMillen, JC. Dissemination and Implementation in Social Service Settings.  
**Additional:** |
|----------|---------|------------------------------------------------|---------------------------------------------------------------|
| Class 14 | April 10 | Systems science methods Partnered and participatory Research in D&I | **Core:**  
Ch. 10. Luke, DA. Systems science methods in dissemination and implementation research.  
Holt. Opportunities and challenges in conducting community-engaged D&I research (2017) TBM.  
Ch. 11. Minkler, M. Participatory Approaches for Study Design and Analysis in Dissemination and Implementation Research.  
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<th>Class 15</th>
<th>April 17</th>
<th>Future issues</th>
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<td><strong>Core:</strong></td>
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<td>Ch. 29: Brownson. Future issues in dissemination and implementation research</td>
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| Class 16 | April 24 | Student presentations (posters) |