Phase 1 Assessment Plan: Articulation of Learning and Program Outcomes

1) Learning Outcomes for the Water Resources (WR) Program mapped into UI University-Level

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<th>WR Learning Outcomes</th>
<th>UI Learning Outcomes</th>
<th>Discipline-specific Learning Outcomes</th>
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| Graduates will have **demonstrated competence** in a specific water resources disciplines, and are able to integrate with other water resources disciplines. | **Learn and Integrate** – Through independent learning and collaborative study, attain, use and develop knowledge in the arts, humanities, science and social sciences with disciplinary specialization and the ability to integrate information across disciplines  
**Clarify purpose and perspective** – Explore one’s life purpose and meaning through transformational experiences that foster an understanding of self, relationships, and diverse global perspectives | To do: Align with related graduate program LO’s |
| Graduates will understand how their own water expertise is similar to, and different from, **other water disciplines.** | ….and the ability to integrate information across disciplines | To do: Align with related graduate program LO’s |
| Students will develop oral and written **communication** skills necessary for working across disciplines, as well as for communicating with the public, government agencies, and political entities. | **Communication** – Acquire, articulate, create and convey intended meaning using verbal and non-verbal methods of communication that demonstrate respect and understanding in a complex society. | To do: Align with related graduate program LO’s |
Graduates will demonstrate competent **research** skills and ability to use the research methods traditionally accepted within their discipline, as well as expertise in developing new methods at the interfaces between their own and other water disciplines.

**Learn and Integrate** – Thorough independent learning and collaborative study, attain, use and develop knowledge in the arts, humanities, science and social sciences with disciplinary specialization and the ability to integrate information across disciplines.

To do: Align with related graduate program LO’s

Graduates will have the **critical thinking and problem-solving skills** necessary to solve applied interdisciplinary problems with social, political, economic, hydrologic, and technologic components.

**Think and Create** – Use multiple thinking strategies to examine real-world issues, explore creative avenues of expression, solve problems and make consequential decisions.

To do: Align with related graduate program LO’s

Graduates will have demonstrated **teamwork skills** that are assessed and evaluated in the context of interdisciplinary teams addressing water resource (a) research questions, and/or (b) applied problems.

**Practice Citizenship** – Apply principles of ethical leadership, collaborative engagement, socially responsible behavior…

To do: Align with related graduate program LO’s

Graduates will have a demonstrated **commitment to productive functioning of the water professional (expert) community**, applying principles of ethical leadership, collaborative engagement, socially responsible behavior, respect for diversity in an interdependent world, and a service-oriented commitment to advance and sustain local and global communities.

**Practice Citizenship** – Apply principles of ethical leadership, collaborative engagement, socially responsible behavior, respect for diversity in an interdependent world, and a service-oriented commitment to advance and sustain local and global communities.

To do: Align with related graduate program LO’s
2) Program Outcomes, to be developed, aligned with UI (a) scholarly and creative activity goals, (b) outreach and engagement goal, and (c) organization, culture and climate goals.

Program Outcomes will include:

- **Faculty interactions across multiple disciplines** (# of faculty actively participating in program, # of disciplines represented by participating faculty, # of hours of interaction);
- Innovative teaching (# of new courses, faculty involved in new courses, ratings by students of integrated, innovative teaching materials and techniques);
- **Integrated water resources course** (# of faculty involved in course design, # of faculty and disciplines represented in course offering, # of students serviced with course, in-depth course evaluation of student learning outcomes);
- **Large inter-disciplinary grants** (# of grants submitted, # of faculty involved, # of disciplines involved, amount of grant dollars obtained, # of graduate students involved, # of stakeholders involved);
- **Course redundancy reduction** (# of courses redesigned, amount of courses significantly modified or eliminated);
- **Increased engagement with stakeholders** (# of meetings with stakeholders, # of stakeholders contacted and participating, rating of effectiveness of stakeholder engagement, # of projects conducted with stakeholders, # of deliverables provided to stakeholders).