Mathematics ADVANCE Graduate Seminar
MTH 507: Introduction to the Mathematics Graduate Program

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Description:
The Mathematics ADVANCE Graduate seminar is a two part seminar created for first year graduate students in mathematics at Oregon State University. Its objectives are to inform graduate student participants in mathematics about systemic inequities leading to under representation of certain communities of people in the mathematical sciences, and to help them engage in personal reflection about their own location in relation to power and privilege. The seminar aims to challenge students to examine how the mathematical sciences discipline has evolved in ways that reproduces hierarchy and dominance, and provide students with critical thinking skills to challenge the dominant gender paradigms, while offering alternative ideologies of gender equality.

Outcomes:
As a result of having taken this seminar, participants will be able to:
1. Explain ways systems of oppression work (including the roles of intersectionality, implicit bias, privilege, fragility) to maintain social inequality.
2. Reflect upon and critically examine personal values and practices in professional settings (such as the classroom, conferences, faculty and student meetings) with particular attention given to the dynamics of relational power and privilege.
3. Analyze the ways systems of oppression are manifest in and maintained by institutions of higher education.
4. Critically evaluate cultures of STEM through a lens of gender (along with intersecting lenses such as race, social class, sexual identity, age, ability, nation, and religion).

Planned Schedule:

Session 1 (Nov 15, 2017)
Welcome and Introduction
Representation in the Mathematical Sciences
Short discussion of paper by Allan G. Johnson
The Diversity Wheel and Identity
Definitions: Implicit Bias, Intersectionality, Privilege, Fragility
Activities: Privilege in STEM
Campus Resources: Bias Incident Response, University Ombuds Office
Survey I

**Between Sessions:** Implicit Association tests (IAT)

**Session 2 (Nov 22, 2017)**
- Welcome and Debrief
- *Discussion of Implicit Association Tests (TBD between sessions)*
- *Activities: The Power Shuffle*
- *Alliance-Building, Coalition-Building, and Reconciliation*
- Survey II

**Seminar Evaluation:** Online Qualtrics Survey