

Derrick Hudson

DI&A Faculty Fellow Project

Overall Description of Initiatives

1. Educational/Service Learning Course: Dialogues on Agency, Race, Citizenship, Society (ARCS) and STEM

Of the existing Diversity, Inclusion & Access (DI&A) initiatives underway at Mines@150, this course partners selected Mines students with college students at the iSSACHAR Center for Urban Leadership, a non-profit organization I helped to establish in the early 2000s. Students enroll in this program to gain leadership and academic exposure to important issues in politics, economics, culture, and spirituality. This initiative falls under the DI&A *Recruitment and Retention* and *Fostering Dialogue* goals. This course, which is taught at the Issachar Center, seeks to create a sustainable location for partnering Mines and Issachar students in one of Denver's historic African American neighborhoods, the Five Points and Whittier communities. It is hoped that over time, this course will begin to attract students of color who will aspire to view Mines as a "top-of-mind" goal to pursue STEM degrees and careers.

2. Activist-in-Residence Scholar (AIRS)

The Activist-in-Residence Scholar will be housed in the Humanities, Arts, and Social Sciences Department and supported by initiatives for Agency, Race, Citizenship, and Society (ARCS), as well as be a contributing member of the Engineering Equity Center (EEC). In order for Mines to "move the needle" on diversity, inclusion, and access, efforts must be made to be mindful of how to connect various stakeholders to build a culture of inclusion that fosters dialogue, encourages recruitment and retention of historically underrepresented groups, and rewards and showcases these efforts to all the stakeholders involved. As a baseline, the AIRS Scholar/Activist should be able to bring together students from the community, students at Mines, faculty at Mines, community leaders, administrators at Mines, and local business and nonprofit professionals. A way to organize how the various stakeholders are brought together is to utilize one of the established models of community development, Asset Based Community Development (ABCD).

Objectives

The syllabus is organized around each topical area (Agency, Race, Citizenship, Society, and STEM). This course is not intended to provide in-depth knowledge in any one area, but to develop a curriculum that cuts across all these areas into one course. As the course evolves, more depth can be added to the curriculum.

The goals and objectives of the Dialogues in ARCS and STEM are as follows:

- A. Identify, Appraise, and Explore the role of agency at the individual and societal level

- B. Trace the contours of how race has been constructed and changed over time in the United States
- C. Describe the importance of why civics and citizenship matter in becoming agents of change in society
- D. Articulate the major dynamics that explain the current political polarization in American society
- E. List the major reasons why there is persistent underrepresentation of students of color in STEM colleges/universities and in industry/career paths
- F. Articulate the basic tenets of the Asset Based Community Development model
- G. Collaborate as a learning community to identify a service learning project for 2022

The expectations of the AIRS Scholar includes:

- Assist in identifying scholar-activists in various fields of study, with a focus on scholars and activists doing work on equity and inclusion in STEM fields. These individuals could be invited to join the Engineering Equity Center (EEC) at Mines.
- Facilitate bringing Community Leaders to offer talks on their work in promoting STEM education amongst historically underrepresented groups
- Be available to provide guest lectures for faculty on your areas of expertise, to include classroom visits, informal gatherings, etc. This “residence” can be virtual or in-person, depending on public health conditions.
- Teach a weekend intensive in their area of expertise (optional deliverable)
- Give one talk to the HASS faculty about their area of work during the academic year
- Provide pedagogy and other curricular materials for faculty to utilize in their courses, especially in the HASS core classes (Nature and Human Values [HASS 100] and Global Studies [HASS 200] Resources Canvas Page)

Justification/need for the program

There is a need to create innovative learning platforms that are embedded in communities that might not be aware of Mines as a realistic institution for those who aspire to STEM careers. Creating curriculum that will become part of the Humanities, Arts, and Social Sciences (HASS) offerings can lay the groundwork to expand these courses to more students moving forward. This course and initiative, is labor intensive and seeks to invest in a small cohort to assess the ability to scale up efforts in coming semesters.

The AIRS scholar is meant to meet the need expressed in one of HASS’s climate surveys on DI&A issues, to diversify HASS faculty. Having a non-residential Fellow is a step in that

direction, and the hope is to build on this inaugural year to create new and innovative ways to attract faculty and experts to HASS and Mines.

Progress made during 2021

I (Dr. Derrick Hudson) successfully completed the syllabus for the Mines/Issachar cohort, and the first class will launch in January, 2022. Students will meet with me monthly, with a final meeting in May, 2022. During the Spring semester, students will be exposed to a robust community development model, Asset Based Community Development (ABCD) to explore a service learning project for the next phase of this project, with a focus on Mines students being partnered with a local high school to share experiences of being a student of color at Mines.

The AIRS scholar that was chosen for this year is Dr. H. Malcolm Newton, an established scholar activist in the Denver community. The expectations of Dr. Newton's appointment is indicated in the prior section. Give one public talk to the Mines community about their area of work during the academic year

Preliminary data/outcomes

There is a total of six Mines students and five Issachar students who will participate in the ARCS course. Students are African, White, African American, and Chicano. Students who are part of the Issachar cohort have been enrolled as non-degree pursuing students and will earn a one-credit Mines academic credit which can be transferred to their college or university. As stated earlier, a working syllabus, which is built on the topics of agency, race, citizenship, society, and STEM, has been developed and being implemented in Spring, 2022.

The AIRS scholar has been a guest lecturer in several HASS courses, and plans are for the AIRS scholar to develop a module on Asset Based Community Development (ABCD) to be a module in HASS 100, Nature and Human Values, one of the core courses in the Mines curriculum in 2022.

Anticipated next steps for 2022

The ARCS course will be taught in Spring, 2022, and the ABCD module will be developed for NHV in Spring/Summer 2022.