



# LMU Anti-Racism Project

Unit Progress: Seaver College of Science & Engineering

## Table of Contents

*Click heading to jump to page*

<a href="#">General Information</a> .....	2
<a href="#">Biology</a> .....	3
<a href="#">Chemistry and Biochemistry</a> .....	4
<a href="#">Civil and Environmental Engineering</a> .....	5
<a href="#">Computer Science Department</a> .....	6
<a href="#">Electrical and Computer Engineering</a> .....	7
<a href="#">Environmental Science</a> .....	8
<a href="#">Health and Human Sciences</a> .....	9
<a href="#">Mathematics</a> .....	10
<a href="#">Mechanical Engineering</a> .....	11



# Seaver College of Science & Engineering

## DEAN'S OFFICE

**Dean:** S.W. Tina Choe, Ph.D.

**Associate Deans:**

Suzanne Larson, Ph.D.

Nazmul Ula, Ph.D.

**Assistant Dean:** Sandra Luca, Ph.D.

**Associate Dean of Diversity, Equity, and Inclusion:**

Heather Tarleton, Ph.D.

<https://cse.lmu.edu/>

## DEAN'S DEI ADVISORY GROUP

Tina Choe *\*Chair*

Dean, Frank R. Seaver College of Science and Engineering

Heather Tarleton

Associate Dean of Diversity, Equity, and Inclusion, Seaver College of Science and Engineering

Ben Fitzpatrick

Clarence Wallen, SJ, Chair, Mathematics

Suzanne Larson

Professor and Associate Dean, Seaver College of Science and Engineering

Barbara Marino

Associate Professor, Electrical and Computer Engineering

NaKasha Mayfield

Assistant to Dean, Academic Affairs Associate

Jeremy McCallum

Professor, Chemistry

Nazmul Ula

Professor and Associate Dean, Frank R. Seaver College of Science and Engineering

Carl Urbinati

Associate Professor, Biology

Kat Weaver

Associate Provost for Research, Professional Development, and Online Learning



# Biology

## POINT OF CONTACT

Carl Urbinati, Ph.D.  
Life Sciences Building  
[Carlo.Urbinati@lmu.edu](mailto:Carlo.Urbinati@lmu.edu)

## PARTICIPATION AND REPORTING

- Attended SA Consultation Session
- Submitted a Progress Report

This unit has not yet presented in a Systemic Analysis Report Out session.

1

2

3

4

5

6

7

8

## SYSTEMIC ANALYSIS STEPS UTILIZED

## PROCESS ■ ISSUES ■ ACTION STEPS ■ OUTCOMES

### PROCESS

Utilizing the 8-Question System Analysis, the Biology DEI committee leads the work of discussing, planning, and prioritizing DEI issues. The department has committed to continuing this work during the 2020-2021 academic year and beyond.

The Biology Department is dedicated to making long-lasting, just change for BIPOC students, staff, and faculty. We hope that the university administration is just as committed beyond the words in communications; the university needs to provide resourcing to individual units, as well as unprecedented (at least for LMU) access to data and involvement in the student recruitment/enrollment process.

## DEPARTMENT OF BIOLOGY DEI COMMITTEE

### Co-chairs:

[Kam Dalhquist](#), Ph.D.

Chair and Professor of Biology

[Cory Evans](#), Ph.D.

Assistant Professor of Biology

[Martina Ramirez](#), Ph.D.

Professor of Biology

[Carl Urbinati](#), Ph.D.

Chair and Associate Professor Biology

The department is deeply dedicated to creating long-lasting change to increase DEI for our students, staff, and faculty. The department believes that our program objectives should be directly tied to the university mission objective of education of the whole person and the promotion of justice, especially as it deals with BIPOC members of our department community. This work will strengthen our already strong community of students, staff, and faculty and will result in success for our BIPOC community members.

### ISSUES IDENTIFIED

The department is currently assessing our mission statement and program objectives to include DEI issues. The department believes that positive changes for DEI can be accomplished must begin with the mission statement. The department is concerned that there is an extensive lack of data about the success of BIPOC students, staff, and faculty. The department would like to see much more data than simply retention and graduation rate data.

### ACTION STEPS

\*The department is currently discussing changes to our mission statement, program objectives and learning outcomes to reflect our dedication to DEI issues.

### OUTCOMES

\*We do not have any outcomes to report, as this work is currently ongoing. We have compiled a working document of action items and requests for data.

### NEXT STEPS

## LEGEND FOR PRESIDENTS COMMITMENTS

Hiring

\* Culture and Climate

Education

## SYSTEMIC ANALYSIS STEPS: QUICK REFERENCE

1. Listen to your team and constituents
2. Review infrastructure and policy
3. Review scope and content of programs
4. Evaluate structural diversity (data)

5. Analyze strategic partnerships
6. Evaluate vision/mission statement
7. Identify training needs
8. Accountability and Assessment



# Chemistry and Biochemistry

## POINT OF CONTACT

David Moffet, Ph.D.  
Chair and Professor of Chemistry and Biochemistry  
[david.moffet@lmu.edu](mailto:david.moffet@lmu.edu)

## PARTICIPATION AND REPORTING

- Attended SA Consultation Session
- Submitted a Progress Report

This unit has not yet presented in a Systemic Analysis Report Out session.

1

2

3

4

5

6

7

8

## SYSTEMIC ANALYSIS STEPS UTILIZED

### PROCESS ■ ISSUES ■ ACTION STEPS ■ OUTCOMES

#### PROCESS

##### Assessment of the needs of our current and future students

The Department currently makes use of a survey instrument to assess the perspectives of Year 3 and 4 majors. The Department will work with the Office of Intercultural Affairs to add questions regarding DEI, which is currently not addressed.

##### Undergraduate Mentoring Program (Big/Little Program)

We will implement a mentoring system to provide support for all incoming students, especially students of color. First-year majors are automatically enrolled in Chem 190 (World of Chemistry). This course is designed to introduce the first-year majors to the faculty, staff, and students in the Department. Through the use of an entrance survey, incoming first year majors ("Littles") will be paired with third year majors who will function as mentors ("Bigs") and unofficial student advisors for two years. When the new students enter their third year (and their mentors have graduated), the new students will, themselves, become eligible to become mentors ("Bigs") to incoming first-year students. Through these pairings, the Department hopes to build a self-sustaining mentoring system to support the individual needs of all incoming students.

##### Academic Program Review

We will embark on our Academic Program Review starting Fall 2021. The Department will incorporate elements of DEI into this Program Review. The Department will also invite colleagues from NOBCCChE (National Organization for the Professional Advancement of Black Chemists and Chemical Engineers) and/or SACNAS (Society for Advancement of Chicanos/Hispanics and Native Americans in Science) to assist the department through external review.

##### Expansion of Seminar Series

Our current seminar series typically invites one to two outside speakers per semester. We will expand this series, with the aim of inviting scientists and/or alumni from underrepresented groups to present and connect with our students and community.

#### HIGHLIGHTS

#### OUTCOMES

In progress.

#### ISSUES IDENTIFIED

In progress.

#### NEXT STEPS

#### ACTION STEPS

- \* Assess the needs of our current and future students
- \* Implement Undergraduate Mentoring Program (Big/Little Program)
- 📄 Incorporate DEI into Academic Program Review
- 📄 Expand Seminar Series with DEI speakers

### LEGEND FOR PRESIDENTS COMMITMENTS

📄 Hiring

\* Culture and Climate

📄 Education

### SYSTEMIC ANALYSIS STEPS: QUICK REFERENCE

1. Listen to your team and constituents
2. Review infrastructure and policy
3. Review scope and content of programs
4. Evaluate structural diversity (data)
5. Analyze strategic partnerships
6. Evaluate vision/mission statement
7. Identify training needs
8. Accountability and Assessment



# Civil and Environmental Engineering

## POINT OF CONTACT

Don Kendall, Ph.D.  
Chair and Clinical Professor of Civil and Environmental Engineering  
[dkendall@lmu.edu](mailto:dkendall@lmu.edu)

## PARTICIPATION AND REPORTING

- Attended SA Consultation Session
- Submitted a Progress Report

This unit has not yet presented in a Systemic Analysis Report Out session.

1

2

3

4

5

6

7

8

## SYSTEMIC ANALYSIS STEPS UTILIZED

## PROCESS ■ ISSUES ■ ACTION STEPS ■ OUTCOMES

### PROCESS

We held a special department meeting and began a discussion on each of the eight questions.

### ISSUES IDENTIFIED

- Enrollment needs to be increased and maintained
- Students are not fully prepared for courses
- Provide continued support to students for success

### ACTION STEPS

- Expand opportunities with the Council for Industry Partnerships (CIP)
- Increase student internships.
- Provide additional faculty support to the student chapter of the ASCE and other organizations like SHPE and NSBE.
- Engage First-year students about these opportunities
- Engage alumni as speakers.
  
- Increase department faculty outreach efforts at local high schools.
- Increase chances for student success by providing free Summer Session prep classes in College Algebra and Pre-Calculus.
- Provide additional tutoring opportunities for students at the Sophomore level in math, chemistry, and algorithms.

### OUTCOMES

- A successful outcome will be re-establishment of NSBE and SHPE. Faculty representatives will be assigned. Assessment will be made on the basis of meaningful student participation and faculty interaction.
- Decisions will need to be made at the University level to establish free summer classes for those students who are not fully prepared.
- We will agendaize relevant meeting topics with the Council for Industry Partnerships and assign mentors. Assessment will be made by the amount of student involvement and feedback we get.

### NEXT STEPS

The faculty would like to reach out more to the students, but felt unsure how to proceed. The suggestion was made to have someone like Vice President Jennifer Abe conduct a professional townhall meeting with them.

We are scheduling another meeting to revisit our Mission Statement. There was also a recommendation to spend time revisiting our Jesuit ideals and the Ignatian Exercises.

## LEGEND FOR PRESIDENTS COMMITMENTS

- Hiring
- Culture and Climate
- Education

## SYSTEMIC ANALYSIS STEPS: QUICK REFERENCE

1. Listen to your team and constituents
2. Review infrastructure and policy
3. Review scope and content of programs
4. Evaluate structural diversity (data)
5. Analyze strategic partnerships
6. Evaluate vision/mission statement
7. Identify training needs
8. Accountability and Assessment



# Computer Science Department

## POINT OF CONTACT

Ray Toal, Ph.D.  
Computer Science  
[Ray.Toal@lmu.edu](mailto:Ray.Toal@lmu.edu)

## PARTICIPATION AND REPORTING

- Attended SA Consultation Session
- Submitted a Progress Report

This unit reported their progress to the community on 9/15/20.

[Presentation video](#)  
[Presentation Slides](#)

1

2

3

4

5

6

7

8

## SYSTEMIC ANALYSIS STEPS UTILIZED

## PROCESS ■ ISSUES ■ ACTION STEPS ■ OUTCOMES

### PROCESS

- Several meetings of Climate/Culture Task Force
- Short discussions at nearly every department meeting
- Summer 2020 Survey (oriented toward curriculum, but with culture elements, over 300 respondents)
- Visits from VP Jennifer Abe to Department Meetings
- Department Implicit Bias Sessions (let by Adam Fingerhut)
- Visit from Nora Murphy to kick off Climate/Culture Task Force
- Faculty+Student+Alumni #antiracism Slack Channel Faculty + Staff Resource Folder in Box
- Student resource web site, on belonging, race, gender, allyship, tech, etc. (<https://lmucs.github.io/resources/resources.html>)
- Discussions on paper by Andrew Forney and Sunai Kim on retention and metrics of success in Seaver by demographic decomposition

### HIGHLIGHTS

#### Culture and Climate Task Force:

- [Andrew Forney](#), Ph.D., (Co-chair)  
Assistant Professor of Computer Science
- [Jordan Freitas](#), Ph.D., (Co-chair)  
Assistant Professor of Computer Science
- [Masao Kitamura](#) (Co-chair)  
Manager of Laboratory Facilities
- [Mandy Korpusik](#), Ph.D., (Co-chair)  
Assistant Professor of Computer Science
- [Ray Toal](#), Ph.D., (Chair)  
Chair and Professor of Computer Science

### ISSUES IDENTIFIED

- It is difficult to determine the best channels for learning about student experiences while avoiding survey-burnout and avoid fatigue from students
- Having to report the "same things over and over," though office hours and casual conversation were often found to be appropriate and useful channels for discovery.
- In our analysis of retention and success data, it is difficult to determine barriers to success due to pre vs. post LMU experiences, and if within LMU, both when, and where (inside vs. outside our department culture).
- We need to support our students in their outside endeavors (e.g., internships) given the well-known and systemic problems within our discipline.

#### What is already happening

- Lab redesign toward more inclusive spaces after 2017 meeting - Stereotype threat and impostor syndrome explicitly discussed in first year courses
- We are now sending students to the Tapia Conference for Diversity in Computing in addition to Grace Hopper Celebration of Women in Computing and Society of Women Engineers

#### Other highlights

- The following resources have been a part of our thinking and process:
  - - 2020 "CMSI Student Attitudes Survey" - Forney and Kim paper (video: <https://vimeo.com/424955874/1a5b8d2ca0>)
  - - Faculty/Staff Box Resource (with readings / anti-racism strategies)
  - - Our CSSI program has been a dramatic, positive, influence on the CMSI program as a whole

### ACTION STEPS

- ✳ Reflect on success of Bytes and Nybbles (Bigs & Littles) student mentorship program.
  - ✳ Form Faculty and Staff Reading Group.
- Department standards for inclusive syllabus language.

### OUTCOMES

- ✳ Data for program improvement.
  - ✳ Increase in faculty and staff DEI literacy and aptitude.
  - ✳ Create space for discussion and ideas.
- Computer Science syllabi will explicitly contain language on DEI expectations.

### NEXT STEPS

## LEGEND FOR PRESIDENTS COMMITMENTS

- Hiring
- ✳ Culture and Climate
- Education

## SYSTEMIC ANALYSIS STEPS: QUICK REFERENCE

- |   |                                      |
|---|--------------------------------------|
| 1. Listen to your team and constituents | 5. Analyze strategic partnerships    |
| 2. Review infrastructure and policy     | 6. Evaluate vision/mission statement |
| 3. Review scope and content of programs | 7. Identify training needs           |
| 4. Evaluate structural diversity (data) | 8. Accountability and Assessment     |



# Electrical and Computer Engineering

## POINT OF CONTACT

Jie Xu, Ph.D.

Chair and Associate Professor of Electrical and Computer Engineering

[jxu@lmu.edu](mailto:jxu@lmu.edu)

## PARTICIPATION AND REPORTING

- Attended SA Consultation Session
- Submitted a Progress Report

This unit has not yet presented in a Systemic Analysis Report Out session.



## SYSTEMIC ANALYSIS STEPS UTILIZED

## PROCESS ■ ISSUES ■ ACTION STEPS ■ OUTCOMES

### PROCESS

We created equity scorecards of our students. We developed a DEI survey to all students, but it has not been administered yet due to our small program size and out of respect for the Black students who are repeatedly asked the same questions in various situations of inquiry. We studied the notes brought back by the Dean's Office from the recent Black alumni panel and Black student listening session. We conducted a literature study of DEI in STEM and Engineering. We have been engaged in a continuous conversation on the DEI climate and experiences within our department. We have reflected on our policies and practices in the context of DEI.

### ISSUES IDENTIFIED

- The diversity of our faculty/staff does not match our student population.
- African American, native American, and Pacific islander students are under-served.
- We need to learn how to effectively educate our students about the value of DEI, how to educate them against microaggressions, imposter syndrome, stereotype threat, and implicit bias.
- We need to better track the retention, graduation, and GPA performance of our under-represented students.
- We should improve our advising efforts to not only provide under-represented students with equal care as everyone else, but to really create equitable opportunities of success for those students.

### ACTION STEPS

- Develop systems to better track the retention, graduation, and GPA performance of our under-represented students.
- Improve advising efforts.

### OUTCOMES

In progress.

## LEGEND FOR PRESIDENTS COMMITMENTS

Hiring

✳ Culture and Climate

Education

## SYSTEMIC ANALYSIS STEPS: QUICK REFERENCE

- |   |                                      |
|---|--------------------------------------|
| 1. Listen to your team and constituents | 5. Analyze strategic partnerships    |
| 2. Review infrastructure and policy     | 6. Evaluate vision/mission statement |
| 3. Review scope and content of programs | 7. Identify training needs           |
| 4. Evaluate structural diversity (data) | 8. Accountability and Assessment     |



# Environmental Science

## POINT OF CONTACT

Rachel Adams, Ph.D.  
Life Sciences Building  
[rachel.adams@lmu.edu](mailto:rachel.adams@lmu.edu)

## PARTICIPATION AND REPORTING

- Attended SA Consultation Session
- Submitted a Progress Report

This unit has not yet presented in a Systemic Analysis Report Out session.



## SYSTEMIC ANALYSIS STEPS UTILIZED

## PROCESS ■ ISSUES ■ ACTION STEPS ■ OUTCOMES

### PROCESS

In order to promote DEI within the Environmental Science Program at LMU, the systematic analysis questions were discussed at the Environmental Science Program Faculty Affiliates Meeting on September 14, 2020. Additionally, three ENVS majors who are currently working as teaching assistants in the ENVS Program were asked for their input and suggestions on ways to best reach out to ENVS students and solicit their thoughts on diversity, equity, and inclusion at LMU. More work is needed on these issues.

### ISSUES IDENTIFIED

Processes used to share opportunities for students should be distributed so all students are aware of resources. The ENVS Program shares opportunities with all students whenever possible, but not all students take advantage of these opportunities.

Course syllabi and mission statement should be edited to ensure the use of inclusive language.

### ACTION STEPS

- \* Assess program mission statement and course syllabi for inclusive language that promotes DEI. Faculty will review course syllabi and mission statement and share with all faculty for feedback.
- \* Two Environmental Science Teaching Assistants hold a social/office hour each week to be available to all ENVS students and answer questions. They have organized an Environmental Science Alumni panel. These events are designed to promote DEI in the program.
- \* Develop mentor/mentee pairs for lower division and upper division students and alumni mentor opportunities.
- \* Improve mechanisms to communicate information with students and faculty more uniformly.

### OUTCOMES

- \* A diverse group of students will be participating in opportunities.

## LEGEND FOR PRESIDENTS COMMITMENTS

- Hiring
- \* Culture and Climate
- Education

## SYSTEMIC ANALYSIS STEPS: QUICK REFERENCE

- |   |                                      |
|---|--------------------------------------|
| 1. Listen to your team and constituents | 5. Analyze strategic partnerships    |
| 2. Review infrastructure and policy     | 6. Evaluate vision/mission statement |
| 3. Review scope and content of programs | 7. Identify training needs           |
| 4. Evaluate structural diversity (data) | 8. Accountability and Assessment     |



# Health and Human Sciences

## POINT OF CONTACT

Hawley Almsteadt, Ph.D.  
Life Sciences Building  
[hawley.almstedt@lmu.edu](mailto:hawley.almstedt@lmu.edu)

1

2

3

4

5

6

7

8

## SYSTEMIC ANALYSIS STEPS UTILIZED

### PROCESS ■ ISSUES ■ ACTION STEPS ■ OUTCOMES

#### PROCESS

We discussed systemic analysis and DEI at our Oct 9<sup>th</sup> department meeting with Dr. Brandon Grimmer.

We continue to work on our curriculum throughout the year and will discuss ways that our curriculum can be improved to meet the needs of diverse students and help address needs of underserved populations. In the past, we have offered courses which teach content about health care for marginalized populations and we will continue to do so moving forward. We have discussed making such a course a required part of the curriculum.

#### ISSUES IDENTIFIED

- The lack of access to data is a challenge to including an analysis of race/ethnicity in our assessment process. We are unable to obtain race/ethnicity data for our student body in a manner that would allow for us to match with assessment outcomes (like by ID number). Overall, we know that the HHSC student body has been ~45% white over the past few years, but it would be helpful to know if all of our students are succeeding in a similar fashion. Is it possible that race/ethnicity data will be available and more accessible at a future time?

#### ACTION STEPS

- ✳ Begin each department meeting with some paired conversations on DEI.
- 📄 Ensure teaching/research/lab assistant opportunities are announced to all eligible students.
- 📄 Assess the racial diversity of our past TA/RA students.
- 📄 We are administering our own questionnaire about career interests and adding the race/ethnicity question to obtain the necessary information.

#### OUTCOMES

In progress.

## PARTICIPATION AND REPORTING

- Attended SA Consultation Session
- Submitted a Progress Report

This unit has not yet presented in a Systemic Analysis Report Out session.

## HIGHLIGHTS

Professor Beaudion required students in her HHSC 495 to sign up for “town hall” meetings to discuss DEI in their internship placements. She has gained a lot of feedback from students regarding DEI at LMU and in HHSC from these ongoing sessions. Students seem to appreciate the opportunity to be heard on these issues.

## NEXT STEPS

Over the summer, many members of HHSC had a discussion about current events and racism. Below are notes and ideas from the discussion:

- One idea is to offer a journal club which reviews research on racial bias in science, medicine, and health care. We could offer an independent study to a group of students who wanted to work together to read and analyze research on racial bias in healthcare and medicine.
- HHSC already offers a course on “Healthcare of Marginalized Populations”. How much information on racism is included in this course? Should the curriculum be expanded to include more information on racism? There is a lot of information on health disparities which could be developed into a course.
- We could reach out to seniors/juniors to see if there are a group who would like to lead some programming on racism in the health sciences. These students may have valuable perspective on what is needed.
- People who are not from an underrepresented race may not be taken seriously on these issues. Involving or asking students of an underrepresented race to be involved may be an undue burden and/or ask them to relive trauma.
- Programming (implicit bias training) should be targeted towards freshman to create a culture of inclusion and be most effective. Is this something that can be included with iSTEM?
- We (faculty/staff) need more training on how to discuss racism and how to update our courses.
- Implicit bias training is now part of faculty orientation.
- VP Jennifer Abe included implicit bias information when visiting with the faculty search committee last year. She shared the Harvard online assessments of implicit bias.
- We could reach out to student run clubs, like the Black Student Union, to be involved with programming.
- Our courses could incorporate a more diverse set of resources, improve diversity of where we find information.
- We could revisit the topics we cover in class to add diversity and inclusion.
- Issues of bias became evident when students evaluated each other on oral presentations.

## LEGEND FOR PRESIDENTS COMMITMENTS

- 📄 Hiring
- ✳ Culture and Climate
- 📄 Education

## SYSTEMIC ANALYSIS STEPS: QUICK REFERENCE

1. Listen to your team and constituents
2. Review infrastructure and policy
3. Review scope and content of programs
4. Evaluate structural diversity (data)
5. Analyze strategic partnerships
6. Evaluate vision/mission statement
7. Identify training needs
8. Accountability and Assessment



# Mathematics

## POINT OF CONTACT

Patrick Shanahan, Ph.D.  
University Hall 2763  
[Patrick.Shanahan@lmu.edu](mailto:Patrick.Shanahan@lmu.edu)

## PARTICIPATION AND REPORTING

- Attended SA Consultation Session
- Submitted a Progress Report

This unit reported their progress to the community on 01/19/21.

[Presentation video](#)  
[Presentation Slides](#)

1 2 3 4 5 6 7 8

## SYSTEMIC ANALYSIS STEPS UTILIZED

### PROCESS ■ ISSUES ■ ACTION STEPS ■ OUTCOMES

#### PROCESS

Formed a DEI committee to engage in departmental DEI systemic analysis:

- a. A review of 46 syllabi from Spring 2020 found that none contained language that specifically mentioned diversity or respect for differences in race, gender, culture, age, religion, or sexual orientation.
- b. Department reviewed the Seaver College Faculty Standards for Attaining Rank and Tenure, the Mathematics Department's Guidelines for Tenure and Promotion to the Rank of Associate Professor, and Mathematics Department's Faculty Standards for Promotion to Professor for specific language or examples of teaching, scholarship, or service duties focused on promoting diversity, equity, and inclusion. Boyer's scholarship of engagement was positively discussed yet it is not specifically recognized or explicitly valued in rank and tenure documents.
- c. Reviewed the 2018-2019 and 2019-2020 tenure-track hiring practices indicated that there are considerable challenges to diversifying the hiring process in mathematics, including utilizing the university required LMU jobs.lmu site which does not allow the department to access EEO statistics on the applicant pool and thus easily assess its efforts in creating a diverse pool of applicants.
- d. Department reviewed the Freshman retention rates and graduation rates, but the small numbers of mathematics majors often result in sample-size errors and are not reported. The DEI Systemic Analysis committee discussed sponsoring surveys or listening sessions methods to obtain student feedback through a Qualtrics survey and/or listening session, but had concerns that Black students at LMU are tired of having to continually repeat their experiences.

## DEI SYSTEMIC ANALYSIS COMMITTEE

[Alissa Crans](#), Ph.D.  
Professor of Math  
[Ben Fitzpatrick](#), Ph.D.  
Professor of Math  
[Lily Khadjavi](#), Ph.D.  
Professor of Math  
[Ed Mosteig](#), Ph.D.  
Professor of Math  
[Patrick Shanahan](#), Ph.D.  
Chair and Professor of Math

Guided by the following question: Do the policies and climate of the Mathematics department reflect the goals of developing an anti-racist community that values and promotes diversity, equity, and inclusion?

## ACTION STEPS

- \* a. A proposal will be presented to the department at a future meeting that will provide suggested DEI language and the department will vote on requiring it or some variation of it on all departmental syllabi.
- b. A committee will be formed and charged with reviewing the Mathematics department documents and proposing revisions with specific language that recognizes and rewards faculty work in the promotion of DEI. The committee will propose new standards to the department for a discussion and vote, and subsequently forward the documents to the Dean's office for approval. The department will develop mentoring strategies aligned with the new standards and in support of DEI work.
- c. The department will conduct a search for a new position to start in Fall 2021 focused on teaching, mentoring, and supporting historically underrepresented groups in STEM once the hiring freeze is lifted. The department will continue to collaborate with the OIA and the Dean's office to investigate alternative hiring practices including targeted hiring, opportunity hiring, hiring at rank, and cluster hiring. The department will continue and expand its efforts to recruit qualified applicants through work with organizations and conferences representing Black or African American, Latinx, and women in mathematics. The department will work with the Dean's office to secure the use of Mathjobs so as not to create additional barriers for faculty of color in the hiring process. The department will continue to require a statement on diversity and inclusion in all tenure-track hiring.
- \* d. The department will discuss the formation of a standing DEI committee that would coordinate efforts towards developing an anti-racist community that values and promotes DEI. The department will contact IR to inquire about how to access aggregated data from multiple years and aggregated data from multiple majors to help track retention and graduation rates. The department will discuss adding DEI questions to senior math major exit interviews, surveys and in listening sessions. The department will investigate alternate approaches to gauge student experience with DEI.

## ISSUES IDENTIFIED

- a. The language used in mathematics department syllabi does not universally reflect our commitment to value and promote diversity, equity, and inclusion.
- b. The mathematics department's standards for tenure and promotion do not explicitly recognize and reward the extra burden of work that fall on the shoulders of faculty of color, nor do they recognize and reward the contributions of faculty to the scholarship of engagement.
- c. The hiring practices in the mathematics department are often inadequate to hire in order to support efforts in promoting diversity, equity, and inclusion.
- d. The department does not have enough information from the socially marginalized students it serves to determine where our efforts to value and promote diversity, equity, and inclusions are succeeding and failing.

## OUTCOMES

- \* a. Syllabi will be reviewed periodically from Spring 2021 onward to determine if they include language that reflects commitment to DEI.
- b. New standards for tenure and promotion will be implemented in Fall 2021.
- c. The department will continue to assess EEO hiring data in its applicant pools. The department will assess recruiting efforts for traditionally underrepresented groups in the mathematical sciences. The department review job postings for alignment with national hiring trends and DEI.
- \* d. A standing DEI committee will be formed for AY 21-22 which will coordinate with the Seaver Associate Dean for DEI.

## LEGEND FOR PRESIDENTS COMMITMENTS

- Hiring
- \* Culture and Climate
- Education

## SYSTEMIC ANALYSIS STEPS: QUICK REFERENCE

- 1. Listen to your team and constituents
- 2. Review infrastructure and policy
- 3. Review scope and content of programs
- 4. Evaluate structural diversity (data)
- 5. Analyze strategic partnerships
- 6. Evaluate vision/mission statement
- 7. Identify training needs
- 8. Accountability and Assessment



# Mechanical Engineering

## POINT OF CONTACT

Jim Landry, Ph.D.  
Acting Chair of Mechanical Engineering  
[jlandry@lmu.edu](mailto:jlandry@lmu.edu)

## PARTICIPATION AND REPORTING

- Attended SA Consultation Session
- Submitted a Progress Report

This unit has not yet presented in a Systemic Analysis Report Out session.

1 2 3 4 5 6 7 8

## SYSTEMIC ANALYSIS STEPS UTILIZED

### PROCESS ■ ISSUES ■ ACTION STEPS ■ OUTCOMES

#### PROCESS

The Department met and had initial conversations on the development of a plan of action to promote DEI at the Departmental level. The process for this systemic analysis will utilize the eight steps to guide reflection provided by the LMU Office of Intercultural Affairs. In addition, some initial actions were discussed and planned for the next few months as the Departmental plan is further developed. We expect to work closely with the new Associate Dean for DEI in the College during the Spring 2021. We decided to start work on two of the eight steps (4 and 7) to guide reflection in Academic Units.

#### HIGHLIGHTS

#### ISSUES IDENTIFIED

#### OUTCOMES

- \* The outcome will identify populations by ethnicity and gender for students both undergraduate and graduate that are not reflected in and represented by the faculty and staff in the Department.
- \* Attendance of identified webinars, many disciplines specific, on DEI by the Department's faculty and staff will help to identify areas to monitor, explore, and assess regarding DEI within the Department.
- \* Attendance of a workshop on DEI by the Department's faculty and staff will help to shape the Departmental plan regarding areas to monitor, explore, and assess regarding DEI within the Department.
- 📄 The Department will receive feedback from the graduates on their experiences and perceptions of diversity, equity, and Inclusion issues and concerns in their program of study.

#### ACTION STEPS

- \* The Department tasked the DEI subcommittee to collect pertinent data such as enrollment, retention, and graduation rate by ethnicity and gender over the past 10 years at the university, college, and department level for undergraduate and graduate programs.
- \* Faculty and staff will be asked to attend webinars and other training focused on DEI issues in academic departments.
- \* We currently are planning a retreat or workshop in the early part of the spring 2021 semester for the department on DEI. We will work with the Office for Intercultural Affairs and other appropriate offices on campus to provide training and resources for this event.
- 📄 The Department's assessment subcommittee and graduate program subcommittee will modify surveys to graduating students to include appropriate questions on DEI. The subcommittees will work with the DEI subcommittee within the Department and the Office of University Assessment to help craft such questions.

#### NEXT STEPS

### LEGEND FOR PRESIDENTS COMMITMENTS

- 📄 Hiring
- \* Culture and Climate
- 📄 Education

### SYSTEMIC ANALYSIS STEPS: QUICK REFERENCE

- |   |                                      |
|---|--------------------------------------|
| 1. Listen to your team and constituents | 5. Analyze strategic partnerships    |
| 2. Review infrastructure and policy     | 6. Evaluate vision/mission statement |
| 3. Review scope and content of programs | 7. Identify training needs           |
| 4. Evaluate structural diversity (data) | 8. Accountability and Assessment     |