Overview: CRISTAL is an interdisciplinary university STEM center serving 28 University of Memphis (UM) departments and the community. We offer a variety of services and resources in STEM education. Our mission is to advance the UM’s efforts to recruit, retain, and prepare the next generation of STEM researchers, educators, and industry professionals. Our vision is to help prepare students with quantitative reasoning, critical thinking, and analytical skills relevant to the 21st century STEM workforce.

Goals and Activities: CRISTAL has three main goals with outreach components for faculty, students and the community.

**Goal 1:** Provide coordination and support for educational initiatives in STEM at the UM.
**Goal 2:** Serve as an umbrella organization to facilitate/promote STEM education initiatives at the UM.
**Goal 3:** To support and foster collaboration among arts and sciences, engineering, and education faculty.

For Faculty:
- Identify STEM education grant opportunities and/or funding sources; coordinate interdisciplinary participation in pursuit of these
- Develop a STEM student database with information/affiliations with various programs for grant development
- Provide pre-award and administrative support for grants
- Connect faculty and projects on campus with partners in local and regional industries
- Identify and coordinate professional development in STEM education for STEM faculty
- Connect faculty with university resources for the reform of classroom instruction

For Students:
- Seek STEM internship opportunities with community partners
- Identify research opportunities, support models, tutoring and programs for STEM undergraduates
- Organize resources to enhance STEM student success (consultation, teaching fellows, tutoring, mentoring, UM Math Bootcamp—a math intervention program, etc.)
- Assist in developing/implementing UM bridge activities to increase K-12 student interest in STEM majors
- Assist in the recruitment of local and regional high school and community college students into STEM disciplines

For the Community:
- Coordinate Tennessee Math Teachers Association (TMTA) Math Regional Competition on the UM campus
- Develop and implement professional development for K-12 teachers locally and regionally
- Assist in the dissemination of STEM-integrated curriculum resources (at the UM) to K-12 teachers

For All Stakeholders:
- Disseminate STEM information, events, internships and opportunities across the UM and throughout the community
- Provide a point of contact between the UM and local/regional school districts for K-12 STEM education initiatives
- Build a STEM community through activities such as “STEMinars”, committees, industry partnerships and outreach to K-12