

STEM Academic Strategies: Setting Yourself Up for Success

MESA/STEM WORKSHOP



Academic Success in STEM - *Setting the Stage*

Attitude

- Personal Mental Attitude(PMA)
 - Embracing the rigor
 - Find the enjoyment of the experience
- Take responsibility for your learning (*you're not in high school anymore*)
 - Instructor as facilitator and a resource, not responsible for your learning
 - Be willing to research topics on your own, participate in learning experiences outside the classroom, and seek knowledge in your discipline – don't just rely on lecture and the textbook

Environment

- Stay on campus and engage in the learning energy on campus and in support resources
- Use the MESA/STEM Academic Success Center

STEM Demands Smart Learning Techniques

- Building block dependent and foundation reliant
- Take each class seriously; Fundamental concepts imperative to future successes
- Interdependence of all subjects
- Study groups/partners imperative for academic survival
- Tutoring should be utilized regularly in weekly schedule
- Simply takes more time, resources, and effort
 - 3:1 ratio vs 2:1 and not to exceed a factor of 70

In Class Techniques: Be alert & involved

- In order to get the most out of class, you need to remain alert and involved
- Be rested: if you get sufficient sleep, you will have a better time paying attention in class
- Eat before class
- The more involved you are, the easier it will be for you to pay attention
- Participate in class discussions or activities
- Avoid distractions – personal concerns, texting, social media, talking to peers, music

In Class Techniques: Be prepared

- Review all syllabi and Stay organized with a class calendar
- Stay organized for your reading: know what the reading assignments are and stay on top of them.
- Be prepared with any needed supplies. This does not just mean a pen/pencil and paper, but anything that would be helpful for class.

In Class Techniques: Be content ready

- Feel Confident with the material
 - This does not mean you have to have mastered the current material, but that you are familiar enough to feel comfortable with it
- The second part of being content-ready is to be prepared for the new material that you are about to learn. This means that you know what topic and terms are coming up
 - Use the syllabus to be aware of content that is coming up
 - Do the assigned readings
 - Try completing practice problems

In Class Techniques: Take effective notes

- Write in your own words
- Write what makes sense
- Do not sacrifice listening for writing
- Indicate important topics/terms
- Notes can be messy— you can fix them later
- Include drawings and make them large enough to annotate

Outside of Class Techniques

- Study regularly
- Study with peers
- Study in an appropriate environment
- Review notes regularly
- Complete the homework and readings
- Use supplemental materials
- Use tutoring, attend review sessions and organized study groups
- Use office hours
- Surround yourself with other students who are dedicated and working hard

Success tips to follow

Attend class regularly it is essential!

Be prepared for class. Complete all homework and reading assignments *before* attending class, and bring all necessary materials with you.

Don't be afraid to ask questions! If you have a question, it is likely that your other classmates do too.

Practice time management! Some students choose to purchase a planner or agenda to help them keep track of important deadlines. You can also use a weekly schedule.

Understand the importance of the syllabus, and refer back to it throughout the semester. The syllabus is a legally binding document between yourself and the instructor. Make sure you're aware of specific course policies and expectations.

Don't let your social life take priority over your academic life. Social activities are important and can add great enrichment to your college experience. However, remember that ultimately you are here to earn a degree. Missing a party will not have the same consequences as missing an essay deadline.

Get to know your professor. Maintaining good communication with your instructor is critical. Don't feel intimidated, and feel free to hang back after class or stop by during your professor's office hours if you have questions.

Take advantage of the resources/services available to you and connect with your success team.

Be in communication with your Support team

- Stay connected with your counselor, professors, MESA/STEM team, peers
- Email, call or set up a virtual meeting
- Don't be afraid to reach out, we are here to support you

MESA/STEM Support Resources

- STEM focused counseling
- STEM 100 & ENGR 100
- Academic success workshops
- [FREE tutoring, review sessions, & organized study group](#)
- Scholarship & internship opportunities
- Textbook reserve/loan