



STEM Growth and Enrichment Programs

Today - For High-School and Pre-College Students

Preface

“STEM” = Science, Technology, Engineering, and Mathematics. We all know its importance for our children’s education, for their futures, for the sustainability and growth of our communities and our whole society. Some youth want more, need more, can handle more, can do more. Many can benefit from an intensive six to eight weeks of learning that is the opposite of boring and is actually fun and that builds networks and connections with people and institutions, and not only with facts and ideas. Sometimes what is missing is just a different way of presenting and teaching, a way that initiates and builds up enthusiasm, excitement, creativity, and zest. That is what our programs are designed to do; they are not the usual “summer school” or tutoring. This short briefing has been prepared to help you (as parent, as student and prospective participant, as family) to know what we can do and accomplish together. Starting, literally, right now.

Our Sessions and our TEAM Approach

We not only work as a team of accomplished professionals with PhDs spanning the STEM range and also a high level of interdisciplinary and entrepreneurial experience, but we work with learners, students, your children, as members of small teams. We emphasize group interaction and synergy. This includes the formal academic learning and reinforcement and also the inventive and engaging projects that are for the most part self-initiated by the students themselves – doing something “cool” that is what they want to do and that helps them to

learn and retain what they learn, and to become leaders and catalysts in their own academic and personal growth.

Each Session is between six and ten weeks in duration. Some particulars depend upon the nature of the subject and the program designed, and all of that depends upon the participating students, their needs and interests, and their current obligations (e.g., summer vacations and trips).

We meet face-to-face at least twice weekly. Some meetings are 1:1, some as a Team, and no team has more than six students. We also do serious work online that supplements and reinforces what gets done in-person.

There is, for each student, for each Team, a [Capstone Project](#). This is something on which students work during the entirety of the Session, doing some parts intensively on their own, some with a mentor-teacher, and primarily as a Team with the other students in their Session. These projects are designed to bring out the innovator, the discoverer, the explorer, the inventor in each student and in the Team.

As part of the Capstone Project, there is a [Team Web Site](#). This is designed as a portal for each student to contribute material and to make presentations with text, graphics, video and any media. The Team Web Site reinforces so many skills and qualities that will be essential in college and beyond, including in future professions and careers, whatever and wherever those may be. In doing the Project, and including the Web Site work, each student in a given Session has a responsible part to do. Together they create a real synergy, something that also can pave the way for publications and/or presentations at conferences and special events.

Part of the weekly activity during the Session, usually done as a group but sometimes with variations depending upon interests and opportunities, is the [Field Enrichment Experience Trip](#). This can be in the form of a visit to a laboratory at a university or corporate center, or to a museum, zoo, botanical garden, or art gallery. It can be an attendance at a musical or theatrical event. It will almost always include a culinary experience of going to an interesting and novel restaurant for a lunch or dinner. We get on our FEET and GO and DO and LEARN.

As you can tell already, this is not what you find in the usual tutoring and summer-school or after-school programs. Our mentor-teachers are all persons with not only the academic qualifications (almost always a PhD or MD or similar degree, plus years if not decades of work experience) but also the cultural, ethnic, and social background to bring something appropriate, new, and invigorating to the rest of the Team. How can going to a classical or jazz concert, or a dance performance, or an exhibit of paintings and photographs, or a meal at a restaurant, aid and support learning and getting stronger in the sciences, in mathematics, in any aspect of engineering or technical subjects? Well, just ask one of our mentor-teachers, or better, yet, let's schedule a time to meet where we can explain how we do this by actually showing you personally.

Schedules, Tuitions, and Coordinations

Working to Make Our Programs and Sessions Fit Your Schedules and Commitments

Not to sound trite, but a lot comes down to “first come first choice.” We want to take on as many students as possible but can only do so much. Our costs are not only “economical” but “minimalist.” \$60.00 per hour of Session time plus any extra fees for materials, travel, admissions, events – all of those being explained and approved beforehand. There’s nothing hidden, and we are not doing this to be profiteers. The entire Program is conceived and run by STEM-field PhD mothers and fathers with grown kids of their own, with histories of teaching and mentoring, often in the context of corporate/academic responsibility and pro-bono programs, and really, on the personal side, we all love to do what education was always about – helping kids get smarter, learn more, enjoy more, and find their directions, personally and professionally, as they go on later to college and beyond.

We do testing, we do evaluations. We include exam preparation into our Sessions, knowing that after a positive time for 6 – 8 weeks, there will be regular school, regular exams, and entrance exams. But one of the things that is a special plus for each of our “graduates” is that they will be able to describe on college applications, for instance, what they did, and what a difference our time and work together made. In fact, they may be able to point to publications written, presentations made, and prizes won.

Now, this has been only a short summary. There is more material, and you can find some of it at <http://academy.instinnovstudy.org>. But the next important thing is to talk and to meet – in-person or online, whatever works for Now, the sooner the better. Remember – we don’t have a static cast-in-concrete catalog. That would not serve the individual special needs and dispositions of your student, your son or daughter. Everything gets tailored to the Person. We call our approach by an acronym that describes what it is – AMPLE, as in more than sufficient, as in **Academic Mentoring and Personalized Learning Enrichment**.

Today is precisely the time to start. Really. Why wait for something that is going to be a very positive and rewarding thing for your daughter or son and indeed for your whole family?

