

Academics at IMSA

Summer Sophomore Orientation 2022

Principal's Office

IMSA's Mission

To ignite and nurture creative, ethical,
scientific minds that advance the
human condition.

IMSA's Beliefs

- All people have equal intrinsic worth.
- All people have choices and are responsible for their actions.
- Belonging to a community requires commitment to the common good.
- Diverse perspectives enrich understanding and inspire discovery and creativity.
- Honesty, trust and respect are vital for any relationship to thrive.
- Learning never ends.
- Meaning is constructed by the learner.
- No one's path in life is predetermined.
- The ability to discern and create connections is the essence of understanding.
- We are all stewards of our planet.
- We can significantly improve life on our planet.

Teaching and Learning

- Develop students' critical thinking and written-communication skills (STEM)
- Foster equity and excellence in STEM teaching and learning
 - Engage the entire IMSA community in re-imagining our work through the lens of equity.
- Facilitate experiences that ensure every student feels connection and community at IMSA
 - Titan Crew
- Build strong bridges between everyone who has a significant impact on students' preparedness and success in the classroom and beyond, including **parents, student life, and other stakeholders.**

Collaboration

- Actively learn/work with and from each other (virtually or face-to-face)
- Offer help to those in need
- Offer and receive feedback from others
- Learn from a diverse array of peers and perspectives
- Problem solve /think critically
- Be open to learning in new ways (different from what you are used to)

Inquiry-based Approach

- Explore academic content by posing, investigating, and answering questions
- Questions are the center of the curriculum
- Focuses on the skills of research, knowledge acquisition and understanding of content
- Students are given opportunities to take ownership of their own learning
- Allows students to draw connections between academic content and their own lives



19;44;27;12 ◉

02:08:46

Academic Disciplines at IMSA

- Math/Computer Science
- Science
- World Languages
- English
- History/Social Science
- Wellness
- Fine Arts

Sophomore Year at IMSA

FALL	SPRING
Math (EX: MI II)	Math (EX: MI III)
World Language (EX: German I)	World Language (EX: German I cont.)
Literary Explorations I	Literary Explorations II
American Studies (Fall OR Spring)	Moving & Learning (Fall OR Spring)
Methods of Scientific Inquiry (Fall OR Spring)	Scientific Inquiries - Chemistry (Fall OR Spring)
Computer Science Inquiry (Fall OR Spring)	Scientific Inquiries - Physics (Fall OR Spring)
Fine Arts (Ex: String Orchestra) Optional	

Sample Schedule

	M	T	W	TH	F
	A Day	B Day	I Day	C Day	D Day
Mod 1 8:00-8:50					
Mod 2 8:55-9:45	American Studies			American Studies	American Studies
Mod 3 9:50-10:40	German I	German I		German I	German I
Mod 4 10:45-11:35	Literary Explorations I			Literary Explorations I	Literary Explorations I
Midday 1 11:40-12:10					
Midday 2 12:10-12:40					
Mod 5 12:45-1:35	Computer Science Inquiry	Scientific Inquiries - Physics		Computer Science Inquiry	Scientific Inquiries - Physics
Mod 6 1:40-2:30	Computer Science Inquiry	Scientific Inquiries - Physics		Computer Science Inquiry	Scientific Inquiries - Physics
Mod 7 2:35-3:25					
Mod 8 3:30-4:20	Mathematical Investigations II	Mathematical Investigations II		Mathematical Investigations II	Mathematical Investigations II

Mathematics

3.0 Credits (includes 0.50 Computer Science Inquiry) + 1.0 Credit Math/Science

Mathematical Investigations I/II, II, III, IV; Geometry
AB Calculus I, II or BC Calculus I, II, III or I/II, II/III
Computer Science Inquiry

Modern Geometries
Statistical Exploration & Description
Statistical Experimentation & Inference
Game Theory and Rationality
Graph Theory with Applications
Discrete Mathematics
Problem Solving

Web Technologies
Object Oriented Programming
Advanced Programming
Microcontroller Applications
Advanced Web Technologies
Computer Seminar

Advanced Problem Solving
Multi-Variable Calculus
Differential Equations
Number Theory
Theory of Analysis
Linear Algebra/Abstract Algebra
Mathematical Modeling
Advanced Topics

Science

4.0 Credits + 1.0 Credit Math/Science

Scientific Inquiries – Chemistry, Physics,
or Advanced Biological Systems
Methods of Scientific Inquiry

Advanced Chemistry I & II
Organic Chemistry I & II
Survey of Organic Chemistry
Biochemistry
Environmental Chemistry
Medicinal Chemistry

Evolution, Biodiversity and Ecology
Cancer Biology
Microbes and Disease
Pathophysiology
Biology of Behavior

Physics: Sound and Light
Physics: Calculus-Based Mechanics
Physics: Calculus-Based
Electricity/Magnetism
Modern Physics
Biophysics

Planetary Science
Geology

Engineering
Computational Science
Microcontroller
Applications

English

3.0 Credits

Literary Explorations I, II and III

Creative Writing Workshop
Digital Literary Studies
Modern Theater
Modern World Fiction
Graphic Novels: Image and Text
Speculative Fiction Studies
Victorian Fiction
Rhetoric and Communication: Science

Shakespeare
Gender Studies
The Idea of the Individual
Tolkien: Language and Literature

History/Social Science

2.5 Credits

American Studies (Fall OR Spring - Sophomore Year)
The World in the Twentieth Century (Spring - Junior Year)

Fall Junior Year Options (Examples)

Ancient World Religion and Philosophy
Conflict in World History
Historic Global Commodities and
Culture

Senior Electives (Examples)

America in the Contemporary World
Political Theory
A History of Astronomy
A History of Biology
History of the Environment
A History of Technology and Culture
United States Government and the
Constitution
African American Studies
Modern Genocide and Mass Violence
Modern Economics

Wellness

1.0 Credit

Moving & Learning



Net and Wall Games
Outdoor and Indoor Games
Dance
Movement and Relaxation
Wellness in the Water
Stress Management for Life

World Languages

2.0 Credits; Complete Level II or Higher

French: I through V

German: I through III

Mandarin Chinese: I through III

Russian: I through III

Spanish: II through V

Fine Arts

0.5 Credit

Concert Band
Wind Ensemble
String Orchestra
Chamber Strings

Concert Choir
Chamber Choir

Music Appreciation
Music Theory

Art and Design
Printmaking
Observational Drawing
Digital Photography
Scientific Illustration
Art and Technology
3D Design Foundations

Purposeful Connection with Academic Team

Titan Crew

A space in which faculty and administrators facilitate experiences to ensure that:

- Every student knows that at least one member of the IMSA **academic team** knows and **cares about them**.
- Every student knows that at least one member of the IMSA academic team is **aware of the student's current hopes and dreams for life after high school**.
- Students across grade levels feel **connection and community**.



Potential Challenges of Learning at IMSA

Big Fish, Little Pond Effect

- Phenomenon – gifted students when attending selective schools, experience lower academic self-concepts compared to peers with comparable abilities who attend regular schools (Mash, 1984)
- Risk factors – extrinsically motivated, highly anxious or low self-esteem

Parent/Family Engagement

How Can You Help Your Student Succeed?

- Emphasize learning, excitement, interests – not grades
- Emphasize effort
- Encourage sleep!
- Remind them about working smarter - time management, involvement in class, seeking help, taking feedback
- Find happy medium for PowerSchool checking
- Maintain effective communication with IMSA - call or email the teacher/RC if you have questions
- Pay attention to calendar – Final Exams/Intersession

Attendance Policy

Point system:

- Tardy/Unexcused absences
- 5 - 30 minutes – 2 points
- > 30 minutes – 3 points

Consequences (in a single class):

- 6 points
- Student develops action plan
- 9 points
- Student/parent/teacher conference
- 12 points (absence only)
- WF in class

Suggested Study Strategies for Your Students

- Organize time
- Utilize feedback
- Seek help from teachers, peers, tutors
- Write to improve your skills
- Deal with disappointment
- Choose to have confidence in your own abilities

And Remember...

Learning Beyond the Classroom

- Student Inquiry & Research (SIR)/Internships
- Diversity, Equity and Inclusion Programs
- Leadership Education (LEAD)
- Service Learning (200 hours required)
- Intersession
- Residential Life- Educational and Social Engagement
- Navigation
- Athletics, Student Clubs, Co-Curricular Activities

Questions?

Thank you!