GirlsGetMath@ICERM

SAMPLE SCHEDULE (FROM 2015)

	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
	Fractals, Fibonacci and Modular Arithmetic	Markov Chains	Image Processing	Fair Division and Apportionment	Keep Secrets Like a Spy
Time					
9:00 – 10:00	Cipher scavenger hunt	The game SET	Fractal cuts	Logic puzzles	Thomas Jefferson's wheel cipher
10:00 – 10:10	Break	Break	Break	Break	Break
10:10 – 11:00	Fractals	Probability and counting	Transforming images with matrix arithmetic	Fair division	Elementary cryptography
11:00 – 11:10	Break	Break	Tour of Brown University and lunch at the "Ratty"	Break	Break
11:10 – 12:00	Fibonacci numbers	Introduction to Markov chains		Apportionment I	A brief prime-er
12:00 – 1:00	Lunch	Lunch		Lunch	Lunch
1:00 – 1:50	Modular arithmetic	Long run predictions and steady states	Image filters and effects	Apportionment II	Public key cryptography
1:50 – 2:00	Break	Break	Break	Break	Break
2:00 – 2:45	GirlsGetMATLAB, an introduction to MATLAB	MATLAB – Matrix algebra	MATLAB – Image transformations	MATLAB – Apportionment	MATLAB – Multiplication, Caesar, and affine ciphers
2:45 – 3:30		MATLAB – Markov chains predictions	MATLAB – Obama me! and other image effects	MATLAB – Modular arithmetic	MATLAB – Exponentiation ciphers and public key exchanges
3:30 – 4:30					Awards Ceremony