

2010 Vigre REU Summer Program Schedule								
Week 2								
	13-Jun	14-Jun	15-Jun	17-Jun	18-Jun	19-Jun		
Time	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
8:30-8:45								
8:45-9:00								
9:00-9:15								
9:15-9:30		Martin: Analytic Number Theory						
9:30-9:45		Martin: Analytic Number Theory						
9:45-10:00		Martin: Analytic Number Theory						
10:00-10:15								
10:15-10:30		Kocic: Mathematical Modeling in Life Sciences						
10:30-10:45		Kocic: Mathematical Modeling in Life Sciences						
10:45-11:00		Kocic: Mathematical Modeling in Life Sciences						
11:00-11:15								
11:15-11:30								
11:30-11:45								
11:45-12:00								
12:00-12:15								
12:15-12:30		Perlis: Groups and Symmetry						
12:30-12:45		Perlis: Groups and Symmetry						
12:45-1:00		Perlis: Groups and Symmetry						
1:00-1:15								
1:15-1:30		Davidson: Fourier Analysis						
1:30-1:45		Davidson: Fourier Analysis						
1:45-2:00		Davidson: Fourier Analysis						
2:00-2:15								
2:15-2:30			Refreshments		Refreshments			
2:30-2:45								
2:45-3:00		MNS 205 Prescott 2:30-5:00	MNS and Math Circles 205 Prescott 234 Prescott	MNS 205 Prescott	Math Circles 234 Prescott	Latex Workshop: Beamer McGuire/Viator		
3:00-3:15								
3:15-3:30								
3:30-3:45								
3:45-4:00								
4:00-4:15								
4:15-4:30		BBQ Greek Amphitheatre 4:00-6:00						
4:30-4:45								
4:45-5:00								
5:00-5:15								
5:15-5:30								

2010 Vigre REU Summer Program Schedule

Week 4

	27-Jun	28-Jun	29-Jun	30-Jun	1-Jul	2-Jul	3-Jul				
Time	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday				
8:30-8:45											
8:45-9:00											
9:00-9:15		Martin: Analytic Number Theory									
9:15-9:30											
9:30-9:45											
9:45-10:00											
10:00-10:15		Kocic: Mathematical Modeling in Life Sciences									
10:15-10:30											
10:30-10:45											
10:45-11:00											
11:00-11:15		Perlis: Groups and Symmetry									
11:15-11:30											
11:30-11:45											
11:45-12:00											
12:00-12:15		Davidson: Fourier Analysis									
12:15-12:30											
12:30-12:45											
12:45-1:00											
1:00-1:15		Davidson: Fourier Analysis									
1:15-1:30											
1:30-1:45											
1:45-2:00											
2:00-2:15		Davidson: Fourier Analysis									
2:15-2:30											
2:30-2:45								Refreshments		Refreshments	
2:45-3:00											
3:00-3:15		Davidson: Fourier Analysis									
3:15-3:30											
3:30-3:45											
3:45-4:00											
4:00-4:15		Davidson: Fourier Analysis									
4:15-4:30											
4:30-4:45											
4:45-5:00											
5:00-5:15		Davidson: Fourier Analysis									
5:15-5:30											

2010 Vigre REU Summer Program Schedule

Week 5

Time	4-Jul Sunday	5-Jul Monday	6-Jul Tuesday	7-Jul Wednesday	8-Jul Thursday	9-Jul Friday	10-Jul Saturday	
8:30-8:45								
8:45-9:00		No Classes: Independence Day Holiday	Martin: Analytic Number Theory			Project Presentations: to be scheduled	Students move out of dorms	
9:00-9:15								
9:15-9:30								
9:30-9:45								
9:45-10:00								
10:00-10:15								
10:15-10:30				Kocic: Mathematical Modeling in Life Sciences				
10:30-10:45								
10:45-11:00								
11:00-11:15								
11:15-11:30								
11:30-11:45								
11:45-12:00								
12:00-12:15			Perlis: Groups and Symmetry					
12:15-12:30								
12:30-12:45								
12:45-1:00								
1:00-1:15			Davidson: Fourier Analysis			Project Presentations: to be scheduled		
1:15-1:30								
1:30-1:45								
1:45-2:00								
2:00-2:15								
2:15-2:30			Refreshments		Refreshments			
2:30-2:45								
2:45-3:00								
3:00-3:15								
3:15-3:30								
3:30-3:45								
3:45-4:00								
4:00-4:15								
4:15-4:30								
4:30-4:45								
4:45-5:00								
5:00-5:15								
5:15-5:30								

		Course Enrollment			
	William Martin	Vlajko Kocic		Robert Perlis	Mark Davidson
	<u>Undergraduates</u> James Boffenmyer Nicholas Cannady Taylor Collins Alfonso Creoze Lacey Fish Tyler Otto Andrew Williamson	<u>Undergraduates</u> James Boffenmyer Scott Dean Lacey Fish Mel Lazo Andrew Stewart Casey Tsai		<u>Undergraduates</u> Andrew Chapple Nicholas Cannady Taylor Collins Alfonso Creoze Scott Dean Brandon Reid Fayez Karoji Mel Lazo Thomas Naugle Andrew Stewart Aaron Reaves Gerard Williams Rachel Weyrens William Bradford Hunter Merrill Thomas Coverson	<u>Undergraduates</u> Andrew Chapple Savarnik Dixit Fayez Karoji Thomas Naugle Tyler Otto Gerard Williams Andrew Williamson Rachel Weyrens Terrence Tappin Argen West Tri Ngo Alysha Harbour Thomas Coverson Casey Tsai
	Willie Bell Hunter Merrill Simeon Weatherby Brandon Reid Argen West Suzette Lake Tri Ngo Alysha Harbour	Willie Bell Willam Bradford Simeon Weatherby Terrence Tappin Savarnik Dixit Suzette Lake Aaron Reaves		Thomas Naugle Andrew Stewart Aaron Reaves Gerard Williams Rachel Weyrens William Bradford Hunter Merrill Thomas Coverson	
	<u>Graduates</u> Dennis Hall Lisa Warsauer Trevor McGuire Robert Viator	<u>Graduates</u> Matthew Dawson Jesse Taylor Joel Geiger Robert Viator Lokendra Singh		<u>Graduates</u> Jesse Taylor Lisa Warsauer Tyler Moss Dennis Hall Trevor McGuire	<u>Graduates</u> Matthew Dawson Joel Geiger Tyler Moss Lokendra Singh
	MNS Group 1	MNS Group 2		Math Circles Group 1	Math Circles Group 2
	Andrew Chapple Nicholas Cannady	Dean Scott Rayez Karoji		James Boffenmyer Taylor Collins Tyler Otto Rachel Weyrens Brandon Reid Mel Lazo Willie Bell Thomas Coverson	Savarnik Dixit Thomas Naugle Casey Tsai Terrence Tappin Alysha Harbour Andrew Stewart William Brandon Simeon Weatherby
	Argen West Alfonso Creoze Gerard Williams Aaron Reaves	Hunter Merrill Tri Ngo Lacey Fish Andrew Williams Suzette Lake			

	Outreach Programs						
	Math Circles						
	Tuesday, June 8	2:30-4:30	Perlis	Making Conjectures			
	Friday, June 11	2:30-4:30	Davidson	The Four Numbers Game			
	Tuesday, June 15	2:30-4:30	William Martin	Russel, Godel, and the uncertainty of mathematics			
	Thursday, June 17	2:30-4:30	Vlajko Kocic	Frieze Patterns, Periodic Cycles, and Lyness' Equation			
	MNS						
	Monday, June 14	2:30-5:00					
	Tuesday, June 15	2:30-5:00					
	Wednesday, June 16	2:30-5:00					
			Abstracts				
	<p>Perlis, Making conjectures: This will be a hands-on mind-on workshop, with audience participation. Starting from some a simple task count the number of different trains that can be built from cars of length 1 or 2) we will jointly form conjectures, leading to a still-unsolved athematical problem.</p>						
	<p>Davidson, The Four Numbers Game: This 'game' is simple but introduces many mathematical questions. As the game is played students will notice some patterns and will be asked to make some conjectures and provide proofs. Equivalence of games will be introduced. What are some invariants of the game? Is there a group in the background? How does it help us? (The definition of a group will be discussed).</p>						
	<p>Martin, Russel, Godel, and the uncertainty of mathematics: This talk will discuss the foundation of mathematics including Russell's great work Principia Mathematica, the philosophical views of Russell as well as that of the /Intuitionists/, and the Gödel Incompleteness results. I shall attempt to make intelligible the Gödel Incompleteness Proof which established the any system of mathematics rich enough to include arithmetic is either inconsistent or incomplete. This theorem has far reaching consequences for one attempting a comprehensive understand of mathematics and its place in the epistemology of ideas.</p>						
	<p>Kocic, Frieze Patterns, Periodic Cycles, and Lyness' Equation : This is hands-on workshop. Seven types of frieze patterns and their symmetries will be discussed. Frieze patterns involving numbers will be introduced, and the connection with Lyness' equation and periodic cycles will be established.</p>						