REU Schedule

Week 1: June 6 – June 12, 2005

The best times for flight instruction are mornings and evenings when it is not too hot. Students can schedule flight lessons at any time, but 6:15-8:15 AM would be a time for the early birds to fly before breakfast. 6:45-8:45 PM would be a good time to fly after dinner. You should call Calvin to set up flight times. The number to the Kansas Air Center is 785.776.1991, his cell is 785.819.4691. He will be unavailable June 10 – June 12 because he is getting married! It will generally work best if two students take a lesson at the same time. All flight training is weather dependent and so subject to change. All meetings will take place in CW 23 unless noted otherwise.

June 6:
9:00-10:00am Everyone – Intros and discuss solutions to the REU admission quiz (student solutions). We will first meet the students at 9:00 am on June 6th in the commons room. I will bring bagles, doughnuts and orange juice in addition to our usual coffee. Please wake up and join us if you are in town.

10:00-11:30 Auckly – The Buckingham \(\pi\) theorem and formulae for lift and drag of an airfoil. Present first two toy problems: 1. Devise a take-off model for an airplane. 2. Find the fastest flight path from Seattle to LA given air currents.

11:30-1:00 Lunch

1:00-2:30 Nagy – Problem seminar. (Don’t expect them to work on putnam problems until after thursday. They will be working on the toy projects)

2:30-3:30 Auckly – Campus tour, Enroll at Willard Hall, Union (get id’s), library, key office, student offices.

3:30-?? Students work on problems together.

June 7:
9:00-10:00 Burkel – Hints for good mathematical writing style.

10:00-11:30 Ryabogin – Intro to Mahler conjecture.

11:30-1:00 Lunch

1:00-2:30 Nagy – Problem seminar. (Don’t expect them to work on putnam problems until after thursday. They will be working on the toy projects)

2:30-?? Students work on problems together.

3:00-5:00 SUROP seminar – Why go to grad school? Union rm 209

6:00- Ice cream with SUROP (everyone welcome) bosco plaza
June 8:
9:00-11:00 Eisel – Intro to LaTeX, MATLAB, Mathematica.
11:00-7:00pm Students work on problems together.
7:00pm-9:00 pm Everyone – Volleyball outside rec-center.

June 9:
8:00-9:15 Calvin Brichat – Flight orientation (Everyone welcome to orientation, faculty must pay for their own lessons)
9:30-11:30 First flight lessons (2 students)
11:30-1:00 Lunch
1:00-3:00 First flight lessons (2 students)
3:15-5:15 First flight lessons (2 students)
6:45-8:45 First flight lessons (2 students)
Students work on problems when not flying.

June 10:
9:00-11:30 Yetter – Intro to quandles Students turn in papers, and report results (attend if you can)
1:00-2:30 Nagy – Problem seminar. (Can give them problems for the weekend.)
2:30-4:30 Ryabogin – More on projection bodies etc. (Radon transform? applications??)
6:30-?? After = Math more time at the rec or trip to movies or... join if you can.

June 11:
1:30-2:30 Turn in papers and discuss conclusions
2:30-5:00 Ramm – Stable numerical differentiation.

June 12:
6:00-?? BBQ at Tuttle creek spillway park (Everyone welcome and encouraged to come. REU provides fare.)

The demonstrations listed for the second week still need to be finalized. They should include the wind tunnle, areo design plane, remote sensing plane, and a basics of aircraft seminar. Because of this we may adjust the mentor meetings (Auckly, Pinner and Yetter).