

Department of Applied Mathematics and Statistics
COLORADO SCHOOL OF MINES
MATH484: Capstone - Mathematical and Computational Modeling

Final Project Presentations - Spring 2015
Thursday, April 23; Tuesday, April 28; and Thursday, April 30
(All times approximate: ± 5 minutes for questions)

April 23rd		
Time	Student(s)	Project Title
R 11:00-11:15	Brian Gregg & Corey Boettiger	"The Effects of External Currents in the Noble Model of Heartbeat Regularity"
R 11:20-11:30	Kerrek Stinson	"A One-dimensional Finite Element Method for the Kortweg-de Vries equation"
R 11:35-11:45	Sarah Verros	"A Finite Difference Method for Modeling Seismic Wave Propagation"
R 11:50-12:00	Jacob Vigil	"The Makarere model of Hepatitis-E infection"
R 12:05-12:15	Andrew Glaws	"Differential Game Theory & Pedestrian Traffic"
April 28th		
Time	Student(s)	Project Title
T 11:00-11:15	Shawn Johnson & Ben Sattelberg	"An Introduction to Diffie-Hellman Encryption"
T 11:20-11:30	James Brown	"Traffic Modeling and the Human Component"
T 11:35-11:50	Matthew Childers & Nathaniel Keller	"A Mathematical Approach to Sand Dune Evolution"
T 11:55-12:15	Paul Diaz, Eric Jones, Kelsey Kalmbach & Chelsea Sandridge	"A Modified SEIR Model for the Spread of Ebola in Western Africa"

April 30th

Time	Student(s)	Project Title
R 11:00-11:15	Dustin Burchett & Alyssa Mandarino	“Analysis & Computation of the Time-dependent Webster’s Horn Equation”
R 11:20-11:35	Tyler Bank, Nhat Thanh Tran & Jeffrey Young	“A Mathematical Model of Ripple Formation”
R 11:40-11:55	Thomas Luckett & April Snively	“Modeling the Effects of Climate Change on Glacial Thickness”
R 12:00-12:10	Holly Wenham	“A Mathematical Model of Basal Cell Carcinoma”