SESEY 2018 Projects				
Faculty	**Topic Area**	**Mentors**	**Project Titles**	**Students**
Ethan Minot	Physics/Materials	Mitch Senger, Dublin Nichols, Daniel McKulley	Nanotechnology: Carbon-based electronics with Graphene	Thien Bui, Shelby Boyersmith
Chi-hung Chang	ChE/Materials	Shujie Li, Yujing Zhang, Alekos Hovekamp and Andrew Gates	Fabrication of patterned nanostructures using a microreactor assisted nanodeposition processes	Veronica Flores, Kate Oberlander, Hugo De Francisco
Nick AuYeung	ChE/EnvE	Renuka Bhatt, Shantae Harris	Solar Thermochemical Energy Storage Methods	Alejandro Dominguez, Grace Corpron
Liney Arnadottir	Materials/ChE	Kingsley Chukwuk, AJ Riise	Hydrogen bonding in catalysis. Can it be predicted using computational methods?	Isaiah Delgado, Pedro Mendoza, Theodore Ngo
Melissa Santala	Materials/ChE	Arielle (Ari) Clauser	Using X-Ray Diffraction to Determine Aomic Structure of Materials	Jade Minzlaff, Kiara Jagels
Bo Sun	Physics/Biophysics	Jihan Kim,	Traction Force Microscopy of Slugs**(Physics background required)**	Nakai McKenzie, Sebastian Acevedo
Elain Fu	BioE	Rachel Polaski, Lael Weltland	Mechanical pull-tab valve in a paper microfluidic device	Andrea Zambrono, Samantha Thompson
Elain Fu	BioE	Kian Patel, Corey Downs	Sucrose based time delay in microfluidic device	Bailey Williams, Chelsea Kendrick,
Michael Olsen	CE/Surveying	Marian Jamieson, Andrew Senogles	Applied Video-Gaming - Modelling the World in 3D (Civil Eng. Surveying and Mapping)	Ezequiel Roberts, Grace Dearborn
Cory Simon	ChE	Mira Khare and Melissa Huyhn	Simulating Airplane and Hotel Overbooking (an everyday problem!)	Adam Jabr, Hunter Dietz
Tala Navab-Daneshmand	EnvE	Gabby Gaza , Lauren Lippman	Antibiotic Resistance: Public Health Issue and Engineering Solution	Jennifer Fuentes, Jojo Croak
Somayeh Pasebani	ME/Materials	Hannah Coe (Atami - HP Campus)	Powder Metallurgy and Additive Manufacturing	Katrina Singh, James Valencia
Skip Rochefort	ChE/Materials	Kelly Hollenbeck, Zoey Mikalatos, Conor Harris	3D Printing - New Soft Materials as Adhesives (Thermoplastic Urethanes - TPU)	Audrey Efroymson, Braydon Veloz
Skip Rochefort	ChE/Materials	Emma Lingle, Charlie Kawasaki	Design of a Forest Fire-Resistant Roofing Panel	Joseph Alalew, Savannah Wood
Skip Rochefort	ChE/Materials	Emma Lingle, Charlie Kawasaki	Design of a Forest Fire-Resistant Roofing Panel	Matthew Stevenson, Ryenne Cordiero
Skip Rochefort	ChE/BioE/Materials	Martha Brasted-Maki , Claire Niemet, Cindy Wong	Reverse Engineering Feminine Hygiene Products (Absorbancy)	Natalie Adams, Jessica Tralmer
Skip Rochefort	ChE/BioE/Materials	Martha Brasted-Maki , Claire Niemet, Cindy Wong	Reverse Engineering Feminine Hygiene Products (Absorbancy)	Isabel Krebs, Courtney Snell
Skip Rochefort	ChE/BioE/Materials	Zavi Kaul, Kyra Kadhim	Spinal Disc Repair-- Composite Hydrogels (sponges) and Disc Simulator Mechanics (DIC)	Kassidy Mashiyama, Daniel Lopez
Skip Rochefort	ChE/BioE/Materials	Zavi Kaul, Kyra Kadhim	Spinal Disc Repair-- Composite Hydrogels (sponges) and Disc Simulator Mechanics (DIC)	Ruby Anne Edwards, Natalie Cole
Lewis Semprini	EnvE/BioE/ChE	Eileen Lukens	Bioremediation of Chlorinated Solvents Using Anaerobic Microorganisms.	Ellie Khoury, Geneva Varga
Lewis Semprini	EnvE/BioE/ChE	Grant Kresge and Gillian Williams	Bioremediation of Chlorinated Solvents Using Aerobic Microorganisms.	Ellie Khoury, Geneva Varga
Tyler Radniecki	EnvE/BioE/ChE	Rich Hilliard, Casey Kanolas, Heidi Reed, Nora Honeycutt	Rain Gardens for Stormwater Treatment: Do they produce more contamination than they remove?	Max Gusukuma, Sofia Pardo
Jeff Nason	EnvE/BioE/ChE	Dylan Oney, Marisela Gonzalez-Crawford	Natural organic matter interactions with nanoparticles: implications for water quality	Scott Cooke, Edgar Ortiz
Cindy Grimm/Ravi Balasubramanian	Robotics	John Morrow, Yi Ong, Eadom Dessalene	Data Capture for Robotic Grasping	Leanne Fischer, Madeline Kralik
Greg Herman	ChE	Joe Bergevin, Trey Diulus	Development of Tantalum Nitride Thin Films**(Chemistry background required)**	Racyn Komata, Alyssa Almer
Morgon Giers	BioE	Ward Shalash, Reese Rozene	Biology of Spinal Cartilage	Samantha Onate, Alejandro Clermont-Delgado, Susana Soto