

# Do you want to send an experiment into outer space?

## GNM 2800: Student Spaceflight Experiments Program



International Space Station



Mission 11 launch (SpaceX CRS-12 at NASA Kennedy Space Center: August 14, 2017

### Information Sessions:

**Thursday, 9/7, 4:30 PM - 5:30 PM, USC-160**

**Friday, 9/8, 3:40 PM - 4:40 PM, USC-160**

**Monday, 9/11, 3:40 PM - 4:40 PM, USC-244b (Dean's Conference Room)**

**Participants:** Open to any Stockton student with a curiosity about science and space travel.

**Course:** GNM 2800: Student Spaceflight Experiments Program (Mission 12)

### Course Goals:

- Students will understand the scientific method and the process of idea generation, experiment and peer review by participation in an actual original research project competition.
- Students will understand the nature of science and its strengths and limitations.

**Course Objective:** Students will participate in a learning community that will sponsor an authentic research competition to design and fly an experiment on the International Space Station (ISS). Participants will work in teams with a faculty mentor to develop a question, hypothesis, and an experimental proposal to test the hypothesis in a microgravity environment in space. Student proposals will be reviewed by a local and a national review board to select the design which will be deployed on the International Space Station during Mission 12 payload of the Student Spaceflight Experiments Program (SSEP) in Spring 2018 (<http://ssep.ncesse.org/>).

**Course Format:** (HYBRID). Students will sign up for 4 credits of GNM 2800 Independent Study. Meetings will be set based on group and mentor availability. For the first several meetings, the entire group will meet to go over the parameters of the program and to organize research groups. Following, student teams will regularly meet with their mentors, develop and research ideas (by logging in a notebook), and work on proposals and feasibility studies, as well as collaborate through a Blackboard course. Note, can be repeated for credit.

**Opportunities:** Continuing group meetings and other activities include sending representatives to the ferry vehicle launch from Cape Kennedy, analysis of the samples on return to earth and presentation of community results at the SSEP national meeting at the Air and Space Museum in Washington, D.C. Participation beyond the fall semester is voluntary or through arranged additional credit as the winning experiment is prepared for the launch to the ISS. See: <https://stocktonspaceflight.org/>

**Faculty Participants:** Dr. Jason Shulman, Dr. Tara Luke, Dr. Peter Straub, Dr. Pamela Cohn, Dr. Norma Boakes, Dr. Melissa Zwick.