



GEMS297 TEAM Project Seminar II

SPRING 2017

TEAM: CARDIO

M 4:30pm –5:20pm

Location: TBA

Gemstone Team Mentor:

NAME: Professor Robert W. Newcomb
1347 AV Williams

(301) 405-3662 (office)

email: Newcomb@eng.umd.edu

office hours arranged by appointment

Gemstone Team Librarian:

NAME: Jordan Sly
Libraries Outreach Librarian
4109 McKeldin Library

(301) 405-9290 (office)

email: jsly@umd.edu

office hours arranged by appointment

Team Members:

Name: Sarah Asfari

Name: Aishwarrya Jayapal

Name: Sahith Mukku

Name: Bareera Qamar

Name: Divyam Satyarthi

Name: Cristina Tous

For a full list of course related policies for all undergraduate courses, please visit:

<http://www.ugst.umd.edu/courserelatedpolicies.html>

Course Description:

Restriction: Must be in the Gemstone program with sophomore standing in this research team.

This is the second of six seminars during which Gemstone students carry out interdisciplinary research with the guidance of a faculty mentor. The team develops its website, prepares and presents its research proposal and begins its research project.

Goals and Objectives:

The following objectives are and expectation for GEMS 297.

- Write a thesis proposal and present it to the team's committee (the mentor, Dr. Coale, Dr. Skendall, the librarian, and at least one expert in the field, who will hopefully later serve as a discussant for the team at the team thesis conference). The proposal should include an

introduction of the problem and the research questions/hypotheses, a summary of the literature, and a detailed description of the research methodology. The due date of the written proposal is two weeks prior to the scheduled proposal presentation date in mid-February. The team must set up a meeting with its committee (including Drs. Coale and Skendall) to occur between the time period noted on the calendar for “Sophomore Teams Proposal Meetings” or as noted by Gemstone Staff. More detailed information on what is expected in this proposal is available.

- Identify/describe the instrument(s) to be used for data collection (e.g. survey/interview questions; rating scales, etc.). If instruments are not available, describe how the team will develop them. Identify research sites and/or individuals required for the team to conduct its study.
- Contact the team’s librarian and ask him/her to review the thesis proposal before it is due and attend the team’s proposal presentation.
- Identify experts to provide feedback and assistance with the research.
- Submit completed IRB and/or IACUC no later than August prior to junior year.
- Continue to collect and review relevant literature/articles for the final thesis.
- Identify scholarly meetings, conferences, and/or journals that could be a forum for the research.
- Identify possible funding sources for the team's research. Apply for appropriate grants.
- Develop a team budget.
- ***Team specific goals/objectives are to obtain MEMS/piezoelectric means of energy harvesting via the heart***

Participation Policy

Full participation in Gemstone is expected. We will respect up to 2 scheduled absences by each team member. These absences include other scholarly activities, professional commitment or family commitment to which the team member does not have to reschedule. These will be noted in advance.

Grading Criteria:

50% - Degree to which progress meets Timeline for Team Success and Quality of Work

- Develop team focus – 10%
- Short and long-term goals – 20%
- Collection of literature and summaries/collection system – 20%
- Research question – 15%
- Liaison with Gemstone Program – 5%
- Start designing team website – 5%
- Start making contacts/outreach to experts – 5%
- Other Team Specific Goals – 20%

20% - Individual contribution to teamwork

Take into consideration peer evaluations here.

20% - Participation

- Be There!
- Participate during class
- Take on responsibilities and roles
- Contribute to the research progress

10% - Attitude

Destructive sarcasm and other attitudes that detract from group process will not be tolerated.

Deadlines/Due: Dates as specified by the Gemstone Program and the approved thesis