Meeting Purpose (*clearly state objectives of the meeting*): Review System-level designs pertaining ot the drive circuitry behind the LED and Photodiode devices for the Oxygen Gas Sensor.

Materials Reviewed (*list all documents reviewed at the meeting including revision*):

Concept Diagram/Selection
Simulation
Chamber Construction

Attendees (*name and discipline / role of all participants*):

Samuel Shin (EE)
Jeremy Goodman (uE)
Jay Radhakrishnan (EE)
Professor George Slack (EE)
Professor David Borkholder (EE)

Recorded by (*name and role of person recording meeting notes*):

_____ (*signature of person recording meeting notes*)

Meeting Date: February 11, 2009

Previous Open Action Items Reviewed (*indicate if any action items (by number) were reviewed and closed from prior reviews or meetings*):

Discussion (*describe any relevant discussions <u>not</u> captured in actions / issues / decisions tables*):

Action Items					
Item #	**Description**	**Responsible**	**Due Date**	**Close Date**	**Comments**
A001	Basic Calculations for required Gas and chamber needed.	JVG	02/18/09	04/17/09	Will be evaluated based upon dimension of chamber & size of gas bottles available.
A002	Look into noise and input bias current considerations regarding photodiode circuit	SHS, JVG	02/21/09	04/17/09	Defined general range of signal for the use of Bandpass filter; will also use bypass capacitor and use prototype board to reduce noise.

Action Items					
Item #	**Description**	**Responsible**	**Due Date**	**Close Date**	**Comments**
A003	Look into prototype boards with ground plane for direct soldering of parts at Digikey/ Vectoboards?	SHS	02/18/09	04/17/09	Obtained from digikey.
A004	Include simulation diagrams of PD circuit after band pass filters are applied	SHS	02/18/09	04/17/09	Will verify using hardware tests instead due to parts being already built.
A005	Test out photodiode circuit for current output	SHS, JVG	02/18/09	04/17/09	Measured power and actual current output- will need further filtering

Issues					
Item #	**Description**	**Responsible**	**Open Date**	**Close Date**	**Comments**
I001	Need BOM	SHS, JVG	02/13/09	04/17/09	Made and submitted
I002	Determine exchange time in gas, and how much of each gas is actually needed?	JVG	02/13/09	04/17/09	Will figure out when entire component is tested.
I003	Look into input impedance and input bias current consideration of amplifier device in photodiode circuit	SHS	02/13/09	04/17/09	Will evaluate as hardware implementation happens
I004	Connection issues might be coming from board.	SHS	02/13/09	04/17/09	Using protoboards
I005	Need filter implementation in the actual circuit simulation to contain required frequencies	SHS	02/13/09	04/17/09	Circuit design with a proposed filter range proposed in Presentation