

# AGENDA

## Ruminators

9/17/2019 (date of meeting) At JW Martin Lab room 71 B

2:30 P.M. – Before 3:20 P.M.

Meeting called by: Dev Shrestha

**Attendees:** Maggi Laan (BE), Kyle Yates (BE), Michael Nguy (EE), Amani Al Fulaiti (CompE)

**Please read:** Look into some of the topics related to our project. 3-5 Questions for Dev to figure out how we can tackle this project. Parameters of project, and what is expected is a good start. Or maybe how to find resources if we need them. If anyone is confused about something, or somethings unclear. We should use this time to thoroughly understand project and clarify things.

**Please bring:** Bring team contract for signatures.

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<b>2:30– 2:40 P.M.</b>	<b>Introduction</b>	JW Martin Lab room 71
	Dev may have something for us or talk amongst selves about things we read until Dev available.	B

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<b>2:40 – Before 3:20 P.M.</b>	<b>Questions/Open communication</b>	JW Martin Lab room 71
	We should each have around 3-5 questions/Clarifications for Dev	B

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### **Additional Instruction:**

Please feel free to edit or add to the agenda! Also

# AGENDA

## Rough Budget

9/19/2019

2:30PM – 3:20PM

-Ruminators

**Attendees:** Amani Al Fulaiti, Kyle Yates, Maggie Haan, Michael Nguy

**Please read:** Notes from Tuesday's meeting

**Please bring:** An itemized list of potential items to include in budget

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<b>2:30PM – 2:35PM</b>	<b>Introduction</b> -	Library, UI campus
<b>2:35PM-3:05</b>	<b>Project costs</b> *Discus costs *Make an Itemized list using excel or paper	Library, UI campus
<b>3:05PM-3:15</b>	<b>Open discussion/close</b> *Homework for next discussion	Library, UI campus
<b>3:15PM – close</b>	<b>Extra time/ leave for class</b>	Library

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**Additional Instruction:**

Feel free to edit this.

# AGENDA

## Advisor Q's Cont'd

9/24/2019

2:30PM – 3:20PM

### -Ruminators

Amani Al Fulaiti, Kyle Yates, Maggi Laan, Michael Nguy, Advisors (Dev and Chad)

#### Attendees:

#### Please read:

Review budget, and last meetings notes.

#### Please bring:

More questions for advisor on data acquisition methods.

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<b>2:30PM – 2:35PM</b>	<b>Introduction</b>	JML
	-	
<b>2:35PM-3:05</b>	<b>Data acquisition and advisor questions</b>	JML
	*Clarify data acquisition technique	
	*Q's for advisor	
<b>3:05PM-3:15</b>	<b>Open discussion/close</b>	JML
	*Homework for next discussion	
<b>3:15PM – close</b>	<b>Extra time/ leave for class</b>	JML

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#### Additional Instruction:

Feel free to edit this.

# Updates

9/26/2019

2:30PM – 3:20PM

-Ruminators

**Attendees:** Amani Al Fulaiti, Kyle Yates, Maggie Haan, Michael Nguy

**Please read:** Notes from last meeting, and some reading into action item.  
Maggie: Clarify Anaerobic digester key stages; Amani: Thoughts on How program will need to be set up (ie if we need loops for a sensor); Michael: Thoughts on how to connect all the working parts (sensors/pumps->program); Kyle: Work out action items for next time, help discussions.

**Please bring:**

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2:30PM – 2:35PM	Introduction	Library
	-	
2:35PM-3:05	Action Items	Lib
	*Discuss for group to be on same page	
3:05PM-3:15	Open discussion/close	Lib
	*Homework for next discussion	
3:15PM – close	Extra time/ leave for class	Lib

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*Additional Instruction:*

Feel free to edit this.

# AGENDA

10/1/2019

2:30 PM – 3:15PM

## Advisor Meeting

**Meeting called by**  
**Attendees:**

Ruminators

Amani Al Fulaiti, Kyle Yates, Maggie Haan, Michael Nguy,  
Advisors (Dev and Chad)

**Please read:**

Review Last Meetings Notes

**Please bring:**

Something to take notes in

**2:30PM JML**

### **Activity**

**JML**

**– 3:15PM**

Open Communication with Dev and Possibly  
Chad.

Ask questions from last Thursday.

Review diagram and proposed retrofit setup.

\*Find out action Items for next Week.

## **Additional Instructions:**

Amani- Ask a question about CompE side

Kyle-Ask question about Pump/ process

Maggie- Clarify keeping pH stability

Michael-Ask about the chamber setup where we put the four reactor chambers  
around retrofit.

# AGENDA

10/3/2019

2:30 PM – 3:15PM

## Document Updates

**Meeting called by**

**Attendees:**

**Please read:**

**Please bring:**

**2:30PM JML**

**– 315PM**

Ruminators

Amani Al Fulaiti, Kyle Yates, Maggie Haan, Michael Nguy

Review Last Meetings Notes

Something to take notes in

**Activity**

Edit Budget and Product Requirements

Possible things to research

\*Find out action Items for next Week.

**Library**

## Additional Instructions:

Amani- Computational Requirements

Kyle-Look over wastewater books

Maggie- Bring Computer

Michael-Budget Update

# AGENDA

## Advisor Meeting

10/8/19

2:30 PM – 3:15PM

**Meeting called by** Ruminators

**Attendees:** Amani Al Fulaiti, Kyle Yates, Maggie Haan, Michael Nguy, Advisors (Dev and Chad)

**Please read:** Last Meetings Notes

**Please bring:** Supplies list

**230-315 – End time**      **Clarifications and Questions**      **JML**  
**Review of Project Requirements**

### Additional Instructions:

Action Items – (from last meeting) All due for next Thursday (10/10)

Kyle – AutoCAD drawing before Thursday

Michael – Upload tech specs

Maggi – Pump Calculations/ Retention

Amani – Data flow rough draft

# AGENDA

Updating info for snapshot (Portfolio/ Log book) 10/10/19  
230PM – 320PM

**Meeting called by** Ruminators  
**Attendees:** Amani Al Fulaiti, Kyle Yates, Maggi Laan, Michael Nguy  
**Please read:** Visit Mind works for portfolio/Log book examples  
**Please bring:** Log Book, Portfolio  
**230PM – 320PM** **Activity** **Library**  
Portfolio Update | Maggi (Bring binder)  
Budget/Product Req. Updates | TBA if needed  
Action Items for next week | Group

## Additional Instructions:

Kyle-Bring Autocad drawing  
Maggi- Bring Portfolio and computer  
Michael- Any potential budget/ sensor updates  
Amani- Constructive criticism of drawing and portfolio



# AGENDA

10/15/2019  
230PM – 320PM

## Prep for Snapshot

**Meeting called by**

**Attendees:**

**Please read:**

**Please bring:**

**230PM – 320PM**

Ruminators

Amani, Kyle, Maggi, Michael

Snapshot files on Mindworks

Any Diagrams/ Work we will be showcasing

**Activity**

**Library**

**Prepare for snapshot**

## Additional Instructions:

**Maggi- Bring Diagrams/Portfolio**

# AGENDA

## Prototype Dimensions

10/17/19

2:30 PM – 3:15PM

**Meeting called by** Ruminators  
**Attendees:** Amani Al Fulaiti, Kyle Yates, Maggie Haan, Michael Nguy  
**Please read:** More literature  
**Please bring:** Thoughts on chamber dimensions  
**230 – 330PM** **Finalize Product Dimensions/ Ideas** **Library**

## Ideas and collaborative communication

### Additional Instructions:

Action Items – Nothing due to snapshot, we will discuss action items for next week

# AGENDA

## Advisor Meeting

10/22/19  
230PM – 320PM

**Meeting called by**  
**Attendees:**

Ruminators  
Maggi Laan, Kyle Yates, Michael Nguy, Amani Fulaiti, Chad,  
and Dev

**Please read:**

Literature corresponding to action item

**Please bring:**

Logbook and questions for advisors

**230PM – 320PM**

### Activity

**JML**

- Updates for Dev
- Q/A
- Action Items going forward
- Think about buying equipment

### Additional Instructions:

Action Items from last meeting:

Kyle – Look up cheap prototype chamber options, and ask friend about 3-D Printing

Maggi- HRT retention time, and further pump calculations

Michael- Rodo blade and data flow spreadsheet

Amani- Questions for Dev regarding data flow/ manipulation

# AGENDA

## Finalize dimensions/Seal design

10/24/19

230PM – 320PM

**Meeting called by**

**Attendees:**

**Please read:**

**Please bring:**

**2:30PM – 3:20PM**

Ruminators

Maggi Haan, Kyle Yates, Michael Nguy, Amani Fulaiti

Notes

Log books, and Ideas for Seal design (for sensors)

**Activity**

**Lib**

Finalize dimensions | Group

Important Purchases | Group

Action Items |

Extra time

## **Additional Instructions:**

Assign action items.

# AGENDA

## Library Meeting!

10/29/19

230PM – 320PM

**Meeting called by**

Ruminators

**Attendees:**

Maggi Haan, Kyle Yates, Michael Nguy, Amani Fulaiti

**Please read:**

**Please bring:**

**Start time – End time Activity**

**Library**

Finalize Dimensions-New Model | Presenter

Roto blade options | Presenter

Airtight seal/connection ideas | Presenter

## **Additional Instructions:**

Due to Dev not being in this week we will use the time to try to solve dimension/plug and mechanical parts issues

# AGENDA

11/5/19

230PM – 320PM

## Advisor Meeting

**Meeting called by**

Ruminators

**Attendees:**

Maggi Haan, Michael Nguy, Amani Fulaiti, Chad, and Dev

**Please read:**

**Please bring:**

Logbook

**Start time – End time**

**Activity**

**JMI**

Advisor Questions | Everyone

Open communication

Action items for next week

# AGENDA

## Itemization/Model Prototype

11/7/19

230PM – 320PM

**Meeting called by** Ruminators  
**Attendees:** Maggi Haan, Kyle Yates, Michael Nguy, Amani Fulaiti  
**Please read:**  
**Please bring:** Logbook/ Computer  
**Start time – End time** **Activity** **Library**  
Choose Items to buy/ Hyperlink to buy | Budget  
Action Items | Presenter

### Additional Instructions:

Bring computer for google drive access

# AGENDA

11/12/19

230PM – 320PM

## Concept Design

**Meeting called by**

**Attendees:**

**Please read:**

**Please bring:**

**Start time – End time**

Ruminators

Maggi Haan, Kyle Yates, Michael Nguy, Amani Fulaiti, Chad,  
and Dev

Reading list

Logbook

**Activity**

Review concept design | Group

Questions and updates | Dev

**JML**

## Additional Instructions:

Bring computer to access files



# AGENDA

## Before break Meeting

11/21/19  
230PM – 320PM

**Meeting called by** Ruminators  
**Attendees:** Maggi Haan, Kyle Yates, Michael Nguy, Amani Fulaiti  
**Please read:** x  
**Please bring:** Logbook  
**Start time – End time** **Activity** **Library**  
Research/Things to focus on  
Over break | Group Discussion  
  
Issues to troubleshoot | Group Discussion  
Action Items over break | Everyone

## Additional Instructions:

Think about potential issues related to design or equipment.

# AGENDA

12/3/19

230PM – 320PM

## Advisor Meeting

### Meeting called by

Ruminators

### Attendees:

Maggi Haan, Kyle Yates, Michael Nguy, Amani Fulaiti, Chad,  
and Dev

### Please read:

### Please bring:

Logbooks, Computer if needed

### Start time – End time

### Activity

JML

After Break Questions | Everyone  
Review Budget | Itemized List  
CFD? | Everyone

### Additional Instructions:

Add Here.

# AGENDA

12/5/2019

230PM – 320PM

## Snapshot Plan

**Meeting called by** Ruminators  
**Attendees:** Maggi Haan, Kyle Yates, Michael Nguy, Amani Fulaiti, Chad, and Dev

**Please read:** Snapshot Requirements

**Please bring:** Computer if needed, and logbook

<b>Start time – End time</b>	<b>Activity</b>	<b>Library</b>
	Plan for Friday (12/6)   Group discussion	
	Updated Model   Maggi	
	CFD Update   Group	

## Additional Instructions:

Maggi and Kyle have class Friday at 8:30 AM and may need to leave snapshot early.

# AGENDA

1/21/20  
230PM – 320PM

## Advisor Meeting

**Meeting called by**  
**Attendees:**

Ruminators  
Maggi Haan, Kyle Yates, Michael Nguy, Amani Fulaiti, Chad,  
and Dev

**Please read:**

Reading list

**Please bring:**

Updates/New thoughts

**Start time – End  
time**

### Activity

### Location (JML)

Where to keep stuff | Group  
Propose meeting longer to work together on  
project | Group  
Inputs from advisors | Advisor(s)

## Additional Instructions:

Feel free to edit this.

I think we should plan to meet longer possibly on weekends in dedicated space with computers with Arduino on it (maybe JML) - Kyle

# AGENDA

## Group meeting

1/23/20

230PM – 320PM

### Meeting called by

Ruminators

### Attendees:

Maggi Haan, Kyle Yates, Michael Nguy, Amani Fulaiti

### Please read:

### Please bring:

### Start time – End time Activity

JML

Find workspace/table in shop (by dev)

Start putting mechanical parts

together | Maggi/Kyle

Think about wiring/code

scheme | Amani/Michael

# AGENDA

1/28/20

230PM – 320PM

## Advisor Meeting

**Meeting called by**  
**Attendees:**

Ruminators  
Maggi Haan, Kyle Yates, Michael Nguy, Amani Fulaiti, Chad,  
and Dev

**Please read:**

**Please bring:**

**Start time – End**  
**time**

Questions to address issues early

### Activity

**Location (JML)**

Address potential power  
problems | Michael/Amani

Updates on stir bar | Maggi/Kyle

Get account number and or card for building  
supplies (Itemized list) | Maggi

## Additional Instructions:

Feel free to edit.

# AGENDA

1/30/2020  
230PM – 320PM

## Team Meeting

**Meeting called by**

**Attendees:**

**Please read:**

**Please bring:**

**230 – 320PM**

Ruminators

Maggi Haan, Kyle Yates, Michael Nguy, Amani Fulaiti

Reading list

Supplies list

### **Activity**

Communicate wiring Issues/ work on chambers | Group

Choose heating device | Group

Get ready for snapshot/ assign

jobs | Group

**Location (JML)**

### **Additional Instructions:**

Use this section for additional instructions, comments, or directions.

# AGENDA

## Advisor Meeting

2/4/20

230PM – 320PM

**Meeting called by**  
**Attendees:**

Ruminators  
Maggi Haan, Kyle Yates, Michael Nguy, Amani Fulaiti, Chad,  
and Dev

**Please read:**

**Please bring:**

**230 – 320PM**

CAD file (Maggi)

### **Activity**

Ask about 3D printing | Group  
Updates on sensors | Amani/Michael  
Open Communication | Group

**Location (JML)**

## **Additional Instructions:**

Feel free to edit this document.



# AGENDA

## Team Meeting

2/6/20

230PM – 320PM

### Meeting called by

Ruminators

### Attendees:

Maggi Haan, Kyle Yates, Michael Nguy, Amani Fulaiti, Chad,  
and Dev

### Please read:

### Please bring:

### Start time – End time Activity

### Location (JML)

Design Review | Group  
Parts Update | Group  
Choose heater | Group

### Additional Instructions:

Edit this.

# AGENDA

## Team Meeting

2/11/20

230PM – 320PM

**Meeting called by**

Ruminators

**Attendees:**

Maggi Haan, Kyle Yates, Michael Nguy, Amani Fulaiti

**Please read:**

**Please bring:**

**Start time – End time Activity**

**Location (JML)**

Engineer release review parts | Group

Address cap issues | Maggi/Kyle

Address electrical issues | Amani/Michael

## **Additional Instructions:**

Feel free to edit.

# AGENDA

## Team Meeting

2/13/20

230PM – 320PM

**Meeting called by** Ruminators

**Attendees:** Maggi Haan, Kyle Yates, Michael Nguy, Amani Fulaiti

**Please read:**

**Please bring:**

**Start time – End time Activity**

**Location (JML)**

Email Reply from PVC? | Maggi  
Group Work (Eng Release PP) | Group  
Any New Shipments? | Group

Maybe cut more Cylinders to be ready for  
machine shop - Group

## Additional Instructions:

Alexiss Turner wants to meet two weeks from today (2/27) I'll check with everyone at our meeting and confirm w her. -Kyle

# AGENDA

## Team Meeting

2/20/20

230PM – 320PM

### Meeting called by

Ruminators

### Attendees:

Maggi Haan, Kyle Yates, Michael Nguy, Amani Fulaiti, Chad,  
and Dev

### Please read:

### Please bring:

### Start time – End time Activity

### Location (JML)

Check for new materials | Group

Cut other chambers | Group

Mark holes and dimension specs for machine  
shop | Group

### Additional Instructions:

Edit this.

# AGENDA

2/25/20

230PM – 320PM

## Advisor Meeting

**Meeting called by**

Ruminators

**Attendees:**

Maggi Haan, Kyle Yates, Michael Nguy, Amani Fulaiti, Chad,  
and Dev

**Please read:**

**Please bring:**

**Start time – End time Activity**

**Location (JML)**

Check for Packages | Group

Talk with Advisor | Group

Cut last Chamber & Project  
updates | Group

## Additional Instructions:

Edit this.

# AGENDA

## Team Meeting

2/27/20

230PM – 320PM

**Meeting called by**

Ruminators

**Attendees:**

Maggi Haan, Kyle Yates, Michael Nguy, Amani Fulaiti

**Please read:**

**Please bring:**

**Start time – End time Activity**

**Location (JML)**

Alexiss Updates | Group

Group Picture? | Group

Figure out when to send chambers to campus facilities | Group

## Additional Instructions:

Edit this.

# AGENDA

## Adviosr/Team Meeting

3/3/20

230PM – 320PM

### Meeting called by

Ruminators

### Attendees:

Maggi Haan, Kyle Yates, Michael Nguy, Amani Fulaiti, Chad, and Dev

### Please read:

### Please bring:

### Start time – End time

### Activity

### Location (JML)

Get Devs opinion on placement of heater/peristaltic/pH/ElectroCond | Group

Order last 3 sets of sensors? | Group

Mark and send pvc to be threaded at facilities after advisor meeting | Group

### Additional Instructions:

Approve current design, once approved send chambers to facilities with correct dimensions for threading. Buy last 3 sets of sensors if confident with our design.

# AGENDA

## Team Meeting

3/5/20

230PM – 320PM

**Meeting called by**

Ruminators

**Attendees:**

Maggi Haan, Kyle Yates, Michael Nguy, Amani Fulaiti

**Please read:**

**Please bring:**

**Start time – End  
time**

**Activity**

**Location (JML)**

Choose Slides for Snapshot | Group

Choose current work to bring  
(chamber/electronics) | Group

Any updates | Group

## Additional Instructions:

Edit this.



# AGENDA

4/7/2020

2:30 PM – 3:15PM

## Advisor Meeting

**Meeting called by**  
**Attendees:**

Ruminators  
Amani Al Fulaiti, Kyle Yates, Maggie Haan, Michael Nguy,  
Dev Shrestha

**Please read:**

**Please bring:**  
230 – 330PM

**Plans Moving Forward**

**Zoom Meeting**

**Making Presentation Wirelessly**

**What needs to be done on prototype**

**Additional Instructions:**