# Schedule 2014 Summer (10-wk session)

# **BEFORE COURSE BEGINS:**

- ✓ Make sure this is the right course for you. It will be advanced and intensive (12 hrs/wk) see <a href="http://people.tamu.edu/~j-packard/courses/portal/Documents/courses.pdf">http://people.tamu.edu/~j-packard/courses/portal/Documents/courses.pdf</a>
- ✓ Review course website: http://people.tamu.edu/~j-packard/courses/wfsc620/wfsc620home.html
- ✓ Read syllabus (link on top menu bar of course home page)
- ✓ Read through this schedule
- ✓ Order textbook in advance to allow for delivery delays (see syllabus)
- ✓ Send instructor your preferred email address: <u>j-packard@tamu.edu</u>
- ✓ Schedule a personal appointment with instructor (in person, phone or SKYPE) within 1 week of first day
- ✓ When notified by email that the course is available, sign on to (<a href="http://ecampus.tamu.edu">http://ecampus.tamu.edu</a>)
- ✓ for computer help, go to [help] on eCampus and/or call the computer help desk 979-845-8300

# Overview of the following pages (1 page per week)

Page	Module (Lesson topics)	eCampus Tasks
2	Module 1: Synthesize (2 wks) Lesson 1. Team Building Lesson 2. Inquiry Questions	<ul> <li>✓ Read Ch. 1-3 (Martin &amp; Bateson 2007)</li> <li>✓ 1 poll- meetings &amp; field work</li> <li>✓ 2 weekly conference calls (synchronous TBA)</li> <li>✓ 2 webinar Video/Notes (asynchronous): Lessons 1 &amp; 2</li> <li>✓ 2 discussion forums (asynchronous): Lessons 1 &amp; 2</li> <li>✓ 1 assignment (asynchronous): Lab A</li> </ul>
4	Module 2: Design (2 wks)  Lesson 3. Research Design  Lesson 4. Data Collection	<ul> <li>✓ Read Ch. 4-6 &amp; 8 (Martin &amp; Bateson 2007)</li> <li>✓ 2 weekly conference calls (synchronous TBA)</li> <li>✓ 2 webinar Video/Notes (asynchronous): Lessons 3 &amp; 4</li> <li>✓ 2 discussion forums (asynchronous): Lessons 3 &amp; 4</li> <li>✓ 3 assignments (asynchronous): Labs B &amp; C;</li> <li>Collaboration mid-term</li> </ul>
6	Module 3: Analyze (3 wks) Lesson 5. Video Analysis Lesson 6. Simple Statistics Lesson 7. Discuss Results	<ul> <li>✓ Read Ch. 7 &amp; 9-11; App. 2 (Martin &amp; Bateson 2007)</li> <li>✓ 3 weekly conference calls (synchronous TBA)</li> <li>✓ 3 webinar Video/Notes (asynchronous): Lessons 5-7</li> <li>✓ 3 discussion forums (asynchronous): Lessons 5-7</li> <li>✓ 3 assignments (asynchronous): Labs D, E, F</li> </ul>
9	Module 4: Create (3 wks) Lesson 8. Draft Presentation Lesson 9. Draft Publication Lesson 10. Research Implications	<ul> <li>✓ Read Appendix 4 (Martin &amp; Bateson 2007)</li> <li>✓ 3 weekly conference calls (synchronous TBA)</li> <li>✓ 3 webinar Video/Notes (asynchronous): Lessons 8-10</li> <li>✓ 3 discussion forums (asynchronous): Lessons 8-10</li> <li>✓ 3 assignments (asynchronous): Labs G &amp; H &amp; Collaboration-Final</li> </ul>

# Week 1: June 2-8, 2014

#### **MODULE 1 SYNTHESIZE**

# Lesson 1. Team building: collaborative research

- 1. Expanding the team
- 2. General inquiry cycle
- 3. Specific focus

POLL: meetings & field work

Webinar Video/Notes: Do you want to collect behavioral data to aid in decision-making, but are not sure where to start? Our research team invites you to join this collaborative learning community, which includes practitioners from the Association of Zoos and Aquaria (AZA). In this webinar, you will learn more about the inquiry cycle and how it will be simplified into 8 steps that the team will complete together over the next 2 months. This team is investigating a "bull switching" treatment for managing big herds of African antelope. However, the inquiry process would be applicable for any research topic.

**TIP1**: the webinar videos are from 2012, so there may be some changes (e.g. The Wilds will not be a partner this year and the webinars will not be live...although we may schedule a few in Module 4)

**TIP2**: if you would like to socialize with course members, use the chat room linked to the [Tools] tab on the left menu bar (or Google hangout)

# **ACTION ITEMS**

Required reading: Ch. 1 (Martin & Bateson 2007)

Recommended supplements:

- Ch 1-4 Blumstein & Fernandez Juricic (2010)
- Look for attachments in the eCampus discussion Forum

# Monday

Email: Respond to emails from your instructor; send an email if you have not received any: j-packard@tamu.edu

Appointment: make a personal appointment with instructor (inperson, phone or SKYPE) to discuss your learning goals

*eCampus*: Read the Announcements & Tasks, then go to the [**BEGIN HERE**] folder on eCampus (left menu bar) view the orientation video (<a href="http://ecampus.tamu.edu">http://ecampus.tamu.edu</a>) and read the contents

# Tuesday

*eCampus:* open the [Module 1] folder and do the POLL (even if you communicated earlier by email, confirm your preferences here) Open the **[Lesson 1]** folder and start to work through each of the learning activities: Video/Notes, Discussion

*Email*: check your email for confirmation of the time for the weekly meeting by conference call and an agenda; provide the phone number (or SKYPE ID) where you would like to be called

# Wednesday tentative call time: 5-6 pm CST

Call: read the agenda before the conference call; think about the agenda items and make a list of your questions and comments; for discussion during the call; be prepared to choose a task for the next week

# Thursday

*email:* check for meeting minutes and your task assignment *eCampus*: continue the learning activities for Lesson 1

# **Friday**

eCampus: complete the learning activities for Lesson 1

Endnotes: If you do not already use Endnotes, get a free download at <a href="http://SELL.tamu.edu">http://SELL.tamu.edu</a>... you will need it next week!

**DUE**: by Sunday Midnight: Discussion Forum **Lesson 1** (5 bonus pts) post at least one comment in response to the first 3 questions (the rest are optional for your learning pleasure)

# Week 2: June 9-15, 2014

#### **MODULE 1 SYNTHESIZE**

# Lesson 2. Inquiry questions: bridging science & practice

- 1. Husbandry challenges
- 2. Intuitive questions
- 3. Testable hypotheses

LAB A: Questions

Webinar Video/Notes: Do you have behavioral questions, but are not sure how to narrow the focus in a manner that will contribute most directly to an adaptive management approach? In this webinar, learn to analyze behavioral questions in terms of the 3 C's: challenges, choices and consequences. This process is the springboard to fine-tuning questions in a manner to best aid in decision-making and in testing hypotheses.

# **ACTION ITEMS**

Required reading: Ch. 2-3 (Martin & Bateson 2007)

Recommended supplements:

- Ch 5-9 Blumstein & Fernandez Juricic (2010)
- Look for endNote library attachment in assignment for Lab A

# Monday

*eCampus*: Read the Announcements & Tasks, then go to the Discussion tool (left menu bar). Read unread comments on the Lesson 1 Forum as review from the previous week.

Open [Lesson 2] in the [Module 1] folder on eCampus (left menu bar). Start the learning activities for Lesson 2: webinar video/notes.

# Tuesday

eCampus: continue Lesson 2: Lab A

*Email*: check for an Agenda for the conference call; prepare to report on your task from the previous call

# Wednesday tentative call time: 5-6 pm CST

Call: think about the agenda items and make a list of your questions and comments for discussion during the call; be prepared to choose a task for the next week

*eCampus*: Check your [**MyGrades**] page for coaching tips and a score on Discussion Forum Lesson 1.

# **Thursday**

email: check for meeting minutes and your task assignment

*eCampus*: post comments on the discussion Forum Lesson 2 (answer at least the first 3 questions)

# Friday

eCampus: complete the learning activities for Lesson 2

**DUE**: by Sunday Midnight: Discussion Forum **Lesson 2** (5 pts) AND Assignment **Lab A** (5 pts)

# Week 3: June 16-22, 2014

# **MODULE 2 DESIGN**

# Lesson 3. Research design: sampling protocols

- 1. Observation rules
- 2. Recording rules
- 3. Combinations: pros & cons

LAB B Sampling

**Webinar Video/Notes:** Now that you have your behavioral research question fairly well defined, how does this translate into a sampling protocol with a sound study design? Learn to distinguish between observation rules and recording rules. This is where you decide whether you will observe one focal individual at a time, or an entire focal group. The recording rules are about whether you decide to record all occurrences of one type of behavior, or use an instantaneous time-sampling technique. In this webinar, you will learn the pros and cons of various combinations of these sampling rules.

### **ACTION ITEMS**

Required reading: Ch. 4-5(Martin & Bateson 2007)

Recommended supplements:

- your pick from EndNotes Smart Group Unit 3
- Look for attachments in the eCampus discussion Forum

# Monday

eCampus: Read the Announcements & Tasks

- go to the Discussion tool (left menu bar). Read unread comments on the Lesson 2 Forum as review from last week.
- PREVIEW: assignment Collaboration-Mid
- Open [Lesson 3] in the [Module 2] folder on eCampus (left menu bar). Start the learning activities for Lesson 3: webinar video/notes.

# Tuesday

eCampus: continue Lesson 3: Lab B

*Email*: check for an Agenda for the conference call; prepare to report on your task from the previous call

# Wednesday tentative call time: 5-6 pm CST

Call: think about the agenda items and make a list of your questions and comments for discussion during the call; be prepared to choose a task for the next week

*eCampus*: Check your [**MyGrades**] page for coaching tips and a score on Discussion Forum Lesson 2 and Lab A.

#### **Thursday**

email: check for meeting minutes and your task assignment

*eCampus*: post comments on the discussion Forum Lesson 3 (answer at least the first 3 questions)

# Friday

eCampus: complete the learning activities for Lesson 3

**DUE**: by Sunday Midnight: Discussion Forum **Lesson 3** (5 pts) AND Assignment **Lab B** (5 pts)

# Week 4: June 23-29, 2014

# **MODULE 2 DESIGN**

# Lesson 4: Data Collection: videos, check-sheets & archives

- 1. Accurate videos
- 2. Reliable check-sheets
- 3. Data archives

LAB C Data Collection
Collaboration-Midterm

Webinar Video/Notes: Are you concerned about observer reliability within your team? Learn how to fine-tune behavioral observation protocols to maximize accuracy and reliability. The advantages and disadvantages of video records and check-sheets will be discussed, as well as ethograms. A workable process for recording and archiving video-data will facilitate efficient sharing within a team.

### **ACTION ITEMS**

**Required reading**: Ch. 6 & 8 (Martin & Bateson 2007) Recommended supplements:

- your pick from EndNotes Smart Group Unit 4
- Look for attachments in the eCampus discussion Forum

#### Monday

*eCampus*: Read the Announcements & Tasks, then go to the Discussion tool (left menu bar). Read unread comments on the Lesson 3 Forum as review from the previous week.

Open [Lesson 4] in the [Module 2] folder on eCampus (left menu bar). Start the learning activities for Lesson 4: webinar video/notes.

# Tuesday

eCampus: continue Lesson 4: Lab C

*Email*: check for an Agenda for the conference call; prepare to report on your task from the previous call

# Wednesday tentative call time: 5-6 pm CST

Call: think about the agenda items and make a list of your questions and comments for discussion during the call; be prepared to choose a task for the next week

*eCampus*: Check your [**MyGrades**] page for coaching tips and a score on Discussion Forum Lesson 3 and Lab B.

### Thursday

email: check for meeting minutes and your task assignment

*eCampus*: post comments on the discussion Forum Lesson 4 (answer at least the first 3 questions)

# Friday

*eCampus*: complete the learning activities for Lesson 4; do Assignment **Collaboration- Midterm** 

**DUE:** by Sunday Midnight: Discussion Forum **Lesson 4** (5 pts) AND Assignment **Lab C** (5 pts) AND **Collaboration-Midterm** 

# Week 5: June 30-July 6, 2014

# **MODULE 3. ANALYZE**

# Lesson 5. Video analysis: activities & events

- 1. Fine-tune predictions
- 2. Sort by activity categories
- 3. Count behavior events

LAB D. Video

Webinar Video/Notes: The videodata for your inquiry project has been collected, now what? Testing your hypothesis is usually a dance, back and forth between the "ideal" and "realitycheck". Listen to a research team decide how they will analyze video-data to extract just the information needed to focus on the inquiry questions. The first step is to sort video clips by activity categories, then score each clip using a recording protocol defined in terms of counting behavioral events and/or time sampling of activity states.

# **ACTION ITEMS**

**Required reading**: Ch. 7 & Appendix 2 (Martin & Bateson 2007) Recommended supplements:

- your pick from EndNotes Smart Group Unit 5
- Look for attachments in the eCampus discussion Forum

# Monday

*eCampus*: Read the Announcements & Tasks, then go to the Discussion tool (left menu bar). Read unread comments on the Lesson 4 Forum as review from the previous week.

Open [Lesson 5] in the [Module 3] folder on eCampus (left menu bar). Start the learning activities for Lesson 5: webinar video/notes.

# **Tuesday**

eCampus: continue Lesson 5: Lab D

*Email*: check for an Agenda for the conference call; prepare to report on your task from the previous call

# Wednesday tentative call time: 5-6 pm CST

Call: think about the agenda items and make a list of your questions and comments for discussion during the call; be prepared to choose a task for the next week

*eCampus*: Check your [**MyGrades**] page for coaching tips and a score on Discussion Forum Lesson 4 and Lab C.

### **Thursday**

email: check for meeting minutes and your task assignment

*eCampus*: post comments on the discussion Forum Lesson 5 (answer at least the first 3 questions)

# Friday

eCampus: complete the learning activities for Lesson 5;

**DUE**: by Sunday Midnight: Discussion Forum **Lesson 5** (5 pts) AND Assignment **Lab D** (5 pts)

# Week 6: July 7- 13, 2014

# **MODULE 3. ANALYZE**

# Lesson 6: Simple statistics: excel worksheets

- 1. Visualize data in graphs
- 2. Contingencies (bar graphs)
- 3. Correlations (scattergrams)
- 4. Means (box/whisker plots)

LAB E. Statistics

Webinar Video/Notes: You have collected behavioral data, now how do you decide which statistics to use to test your hypotheses? Learn about spreadsheets that will aid you in calculating the simple non-parametric tests suitable for most behavioral data. The first step is to plot your data and stare at it. A research team will demonstrate how to analyze bar graphs (contingencies), scattergrams (correlations) and box/whisker plots (means).

### **ACTION ITEMS**

**Required reading**: Ch. 9-10 (Martin & Bateson 2007) Recommended supplements:

- your pick from EndNotes Smart Group Unit 6
- Look for attachments in the eCampus discussion Forum

#### Monday

*eCampus*: Read the Announcements & Tasks, then go to the Discussion tool (left menu bar). Read unread comments on the Lesson 4 Forum as review from the previous week.

Open [Lesson 6] in the [Module 3] folder on eCampus (left menu bar). Start the learning activities for Lesson 6: webinar video/notes.

# Tuesday

eCampus: continue Lesson 6: Lab E

*Email*: check for an Agenda for the conference call; prepare to report on your task from the previous call

# Wednesday tentative call time: 5-6 pm CST

Call: think about the agenda items and make a list of your questions and comments for discussion during the call; be prepared to choose a task for the next week

*eCampus*: Check your [**MyGrades**] page for coaching tips and a score on Discussion Forum Lesson 5 and Lab D.

#### Thursday

email: check for meeting minutes and your task assignment

*eCampus*: post comments on the discussion Forum Lesson 6 (answer at least the first 3 questions)

# Friday

eCampus: complete the learning activities for Lesson 6;

**DUE**: by Sunday Midnight: Discussion Forum **Lesson 6** (5 pts) AND Assignment **Lab E** (5 pts)

#### Week 7: July 14-20, 2014 **ACTION ITEMS** Required reading: Ch. 11 (Martin & Bateson 2007) **MODULE 3. ANALYZE** Recommended supplements: your pick from EndNotes Smart Group Unit 7 **Lesson 7: Discuss results:** • Look for attachments in the eCampus discussion Forum testing hypotheses Monday eCampus: Read the Announcements & Tasks, then go to the 1. Summarize results Discussion tool (left menu bar). Read unread comments on the 2. Testing predictions 3. Critical thinking Lesson 4 Forum as review from the previous week. Open [Lesson 7] in the [Module 3] folder on eCampus (left menu bar). Start the learning activities for Lesson 7: webinar video/notes. LAB F. Discuss Results Tuesday eCampus: continue Lesson 7: Lab F Webinar Video/Notes: You have graphs and statistical tests Email: check for an Agenda for the conference call; prepare to report on summarizing your results, but your task from the previous call how does this help you test your hypotheses? Listen to a research team discuss whether they can Wednesday tentative call time: 5-6 pm CST reject one or more working Call: think about the agenda items and make a list of your questions hypotheses based on their and comments for discussion during the call; be prepared to choose a task for the next week results. Learn how the team distinguishes between causation eCampus: Check your [MyGrades] page for coaching tips and a score on and correlation in applying Discussion Forum Lesson 6 and Lab E. critical thinking skills to decide whether their measurements **Thursday** were good enough to be a test of email: check for meeting minutes and your task assignment the hypotheses. eCampus: post comments on the discussion Forum Lesson 7 (answer at least the first 3 questions) Friday eCampus: complete the learning activities for Lesson 7;

Assignment Lab F (5 pts)

**DUE**: by Sunday Midnight: Discussion Forum **Lesson 7** (5 pts) AND

# Week 7: July 21-27, 2014

# **MODULE 4. CREATE**

# Lesson 8. Draft presentation: storyboard of results

- 1. Structure the story
- 2. Criteria for effectiveness
- 3. Constructive critique

LAB G. Presentation

**Webinar Video/Notes:** Your boss has asked you to present the results of your behavioral inquiry at a staff meeting. How do you tell the story of your project, providing enough detail so they will understand, but not too much so they will be able to focus on how this relates to the decision at hand? Listen to a research team. present their draft presentation and offer suggestions for improvement to enhance communication. Pick up some creative tips and offer a few of your own.

# **ACTION ITEMS**

**Required reading**: Appendix 4 (Martin & Bateson 2007) Recommended supplements:

- your pick from EndNotes Smart Group Unit 8
- Look for attachments in the eCampus discussion Forum

# Monday

email: check for an update about scheduling a live webinar for this week; if you can't make it, the video will be archived for asynchronous viewing

eCampus: Read the Announcements & Tasks, then go to the Discussion tool (left menu bar). Read unread comments on the Lesson 4 Forum as review from the previous week.

Open [Lesson 8] in the [Module 4] folder on eCampus (left menu

### Tuesday

eCampus: continue Lesson 8: Lab G

bar). Start the learning activities for Lesson 8:.

*Email*: check for an Agenda for the conference call; prepare to report on your task from the previous call

# Wednesday tentative call time: 5-6 pm CST

*Call:* think about the agenda items and make a list of your questions and comments for discussion during the call; be prepared to choose a task for the next week

*eCampus*: Check your [**MyGrades**] page for coaching tips and a score on Discussion Forum Lesson 7 and Lab F.

# **Thursday**

email: check for meeting minutes and your task assignment

*eCampus*: post comments on the discussion Forum Lesson 8 (answer at least the first 3 questions)

# Friday

eCampus: complete the learning activities for Lesson 8;

**DUE**: by Sunday Midnight: Discussion Forum **Lesson 8** (5 pts) AND Assignment **Lab G** (5 pts)

# Week 7: July 28-Aug. 3, 2014

# **MODULE 4. CREATE**

# Lesson 9: Draft publication for peer-review

- 1. Know your audience
- 2. Editors & reviewers
- 3. Leap-frog the writer's block

LAB H. Publication

Webinar Video/Notes: : Ready to publish the results of your behavioral inquiry? Listen to the experiences of a research team that takes the outline from a presentation and turns it into a manuscript for peer review. Learn about the checklist of do's and don'ts that editors and reviewers will look for in evaluating your manuscript. Share creative tips for getting past writer's block.

# **ACTION ITEMS**

**Required reading**: Appendix 4 (Martin & Bateson 2007) Recommended supplements:

- your pick from EndNotes Smart Group Unit 9
- Look for attachments in the eCampus discussion Forum

# Monday

email: check for an update about scheduling a live webinar for this week; if you can't make it, the video will be archived for asynchronous viewing

 $eCampus\colon$  Read the Announcements & Tasks, then go to the Discussion tool (left menu bar). Read unread comments on the Lesson 4 Forum as review from the previous week.

Open [Lesson9] in the [Module 4] folder on eCampus (left menu bar). Start the learning activities for Lesson 9:.

# **Tuesday**

eCampus: continue Lesson 9: Lab H

*Email*: check for an Agenda for the conference call; prepare to report on your task from the previous call

# Wednesday tentative call time: 5-6 pm CST

Call: think about the agenda items and make a list of your questions and comments for discussion during the call; be prepared to choose a task for the next week

*eCampus*: Check your [**MyGrades**] page for coaching tips and a score on Discussion Forum Lesson 8 and Lab G.

# **Thursday**

email: check for meeting minutes and your task assignment

*eCampus*: post comments on the discussion Forum Lesson 9 (answer at least the first 3 questions)

# Friday

eCampus: complete the learning activities for Lesson 9;

**DUE**: by Sunday Midnight: Discussion Forum **Lesson 9** (5 pts) AND Assignment **Lab H** (5 pts)

# Week 7: Aug. 4-10, 2014

# **MODULE 4. CREATE**

# Lesson 10: Research implications for practical decisions

- 1. Challenges & choices
- 2. Practical utility of results
- 3. Lessons learned in adaptive management

Collaboration- Final Course evaluation

### Webinar Video/Notes::

Consider the perspectives of the practitioners on your inquiry team. The researchers have presented results of the behavioral inquiry. Now you are ready to dialogue with your team about what this means in terms of adaptive management to meet the goals for animal care. Listen as practitioners and researchers return to the "3 C's" to discuss the practical implications of a behavioral study: challenges, choices, consequences.

# **ACTION ITEMS**

Required reading: none

Recommended supplements:

- your pick from EndNotes Smart Group Unit 10
- Look for attachments in the eCampus discussion Forum

# Monday

email: check for an update about scheduling a live webinar for this week; if you can't make it, the video will be archived for asynchronous viewing

eCampus: Read the Announcements & Tasks, then go to the Discussion tool (left menu bar). Read unread comments on the Lesson 4 Forum as review from the previous week.

Open [Lesson10] in the [Module 4] folder on eCampus (left menu bar). Start the learning activities for Lesson 10:.

### Tuesday

eCampus: continue Lesson 10: preview Assignment- Collaboration

*Email*: check for an Agenda for the conference call; prepare to report on your task from the previous call

# Wednesday tentative call time: 5-6 pm CST

*Call:* think about the agenda items and make a list of your questions and comments for discussion during the call; be prepared to choose a task for the next week

*eCampus*: Check your [**MyGrades**] page for coaching tips and a score on Discussion Forum Lesson 9 and Lab H.

# **Thursday**

email: check for reminder to do course evaluation: http://pica.tamu.edu; when completed, reply to get off "nag list"

*eCampus*: post comments on the discussion Forum Lesson 10 (answer at least the first 3 questions)

#### Friday

eCampus: complete the learning activities for Lesson 10;

**DUE**: by Sunday Midnight: Discussion Forum **Lesson 10** (5 bonus pts) AND Assignment **Collaboration-Final** (10 pts)