ISP 203L: Geology and the Human Environment – Fall 2016

PURPOSE OF LAB

The ISP 203L laboratory is designed to introduce you to strategies that we can use to understand the world around us. We have focused this lab on the Red Cedar River (RCR) to provide you with a better understanding of your local environment. These labs should provide you with a hands-on basis for understanding the scientific process in a local context.

ISP 203L Goals*

By the end of the course, students will be able to:

1. Think of their surroundings in terms of Earth's spheres (biosphere – life, atmosphere - air, hydrosphere - water, geosphere – rocks and soil) in the context of the Red Cedar River. In addition to **remembering** and **understanding** ideas and concepts related to Earth's spheres in the context of the RCR, you should be able to **apply** this knowledge in contexts outside of the RCR. (Aligned with University goals #1 and 3 and CISGS goals #1 and 3)

2. Investigate relationships among Earth's spheres in the context of the RCR. You will be **collecting** and **analyzing** data pertaining to the Earth's spheres throughout the semester. Additionally, you will be **developing** and **testing** hypotheses pertaining to the RCR on multiple occasions. (Aligned with University goals # 1 and 3 and CISGS goals # 1, 2, and 3)

3. Communicate ideas pertaining to the Earth's spheres in the context of the RCR. You will individually **document** and both **create** and **present** a project that represents a characteristic of the RCR over space. (Aligned with University goals # 1, 2 and 3 and CISGS goals # 1, 2, and 3)

*(Please see MSU Institutional and CISGS learning goals below)

MSU institutional Learning Goals

1. Analytical Thinking

The MSU graduate uses ways of knowing from mathematics, natural sciences, social sciences, humanities, and arts to access information and critically analyzes complex material in order to evaluate evidence, construct reasoned arguments, and communicate inferences and conclusions

a. Acquires, analyzes, and evaluates information from multiple sources
b. Identifies and applies, as appropriate, quantitative methods for defining and responding to problems

2. Effective Communication

The MSU graduate uses a variety of media to communicate effectively with diverse audiences

a. Identifies how contexts affect communication strategies and practices
b. Engages in effective communication practices in a variety of situations and with a variety of media

3. Integrated Reasoning

The MSU graduate integrates discipline-based knowledge to make informed decisions that reflect humane social, ethical, and aesthetic values

a. Uses a variety of inquiry strategies incorporating multiple views to make value judgments, solve problems, answer questions, and generate new understandings

Goals for Student Learning in Integrative Studies-General Science (CISGS)

All ISB/ISP courses are a mixture of thematic and disciplinary approaches to knowledge of the physical and biological sciences. Completion of the required curricula will lead to the following four competencies:

1. **Scientific Knowledge:** Students will be able to describe some of the major concepts in science and be able to use them to explain important natural phenomena.
2. **Scientific Practice:** Students will be able to discriminate between ideas that do and do not constitute proper subjects for science, give examples of how scientific understanding itself constantly evolves, and be able to use scientific approaches to solving problems in the natural world.
3. **Scientific Appreciation:** Students will hopefully learn to value the efforts of physical and biological scientists as they continue to address practical needs and continue research into matters of fundamental and lasting importance.

STRUCTURE OF LAB

You will be working in groups with 3-5 other students. All laboratory work will be completed as a group, while **all assignments will be completed individually**. Please do not remove materials from your lab room unless told to do so by your instructor. **Come prepared – you are expected to wear appropriate shoes and clothing for working out of doors.**

Contact your instructor if you have any questions about the lab, absences from lab, or grades.

Instructor Name: _____

Instructor Office Hours: _____

Instructor Email: _____

Contact the ISP 203L **Laboratory Director** if you have any questions about the program or if you have any suggestions for the lab:

Osvaldo Hernandez

herna106@msu.edu

118 North Kedzie Hall

Grading Policy:

This laboratory is a **stand-alone course**. Your grade will be calculated based upon on-time completion of individual and group assignments. You will INDIVIDUALLY complete pre-lab assignments, post-lab assignments, and a project documenting a change on the RCR over space. All assignments MUST be completed on time and submitted as a **PDF**. **Assignments will NOT be accepted for labs you failed to attend**.

Assignment	**Points**
Pre-lab (14 @ 10 points each)	140
Post-lab (14 @ 10 points each)	140
Project Proposal	20
Individual Project	100

GRADING SCALE

GPA	**Minimum %**	**GPA**	**Minimum %**
4.0	90	2.0	70
3.5	85	1.5	65
3.0	80	1.0	60
2.5	75	0.0	<60

LABORATORY POLICIES

Attendance Policy:

Laboratory attendance is mandatory. Assignments will NOT be accepted for labs you failed to attend. You must attend the section for which you are officially enrolled. A 0.0 grade will be issued for the lab or the entire course if you attend the wrong section without informing your Instructor as well as the Lab Coordinator. In the event of a missed lab due to grief, a Grief Request Form can be found in the RO home page (https://reg.msu.edu/). **IMPORTANT**: Note that you will be required to attend your regularly scheduled lab during finals week. Please notify your instructor with any known conflicts as soon as possible.

Late Policy:

NO LATE ASSIGNMENTS WILL BE ACCEPTED. Assignments must be submitted over DESIRE TO LEARN. Assignments are due by class time for the section you are enrolled. You must see the Laboratory Director BEFORE the INDIVIDUAL project due date if you have a conflict. **Students arriving 10 minutes after the start of class will be considered LATE and their prelab will NOT be accepted. Students arriving 20 minutes after the start of class will be considered ABSENT and neither prelab nor postlab will be accepted.**

Make-Up Labs:

Make-up labs will **ONLY** be offered under special circumstances and with approval of your instructor. Make-up labs will only be offered for special cases of DOCUMENTED illness, accident, or other emergency. You must complete a **Request for a Make-Up Lab** to schedule a make-up lab. This request must be accompanied by **appropriate documentation** of illness, accident, or other emergency situation. This form must be turned in to your instructor via email **prior to your NEXT scheduled lab**. All reasons for make-up requests will be kept strictly confidential. Your instructor will notify you of a scheduled make-up via email.

Academic Integrity:

Each week, you are responsible for completing a pre-lab assignment. Completion of these pre-labs is ABSOLUTELY essential for participation in the lab itself. All pre-lab, post-lab, and project assignments must be completed **ON YOUR OWN AND IN YOUR OWN WORDS**. The university policy on academic integrity will be followed when dealing with such issues in class. Please don't present someone else's work as your own; it makes everyone unhappy!

Definition of Academic Integrity:
https://www.msu.edu/~ombud/academic-integrity/What%20is%20Academic%20Integrity.html

Plagiarism Policy:
https://www.msu.edu/~ombud/academic-integrity/plagiarism-policy.html

Misc. academic integrity:
http://www.reg.msu.edu/AcademicPrograms/TextAll.asp?Section=535

Online SIRS:

Michigan State University takes seriously the opinion of students in the evaluation of the effectiveness of instruction, and has implemented the SIRS (Student Instructional Rating System) process to gather student feedback. This course utilizes the "online SIRS" system; this approach is being used to reduce paper waste. You will receive an email sometime during the last two weeks of class asking you to fill out the SIRS online form at your convenience. Please note the final grade for this course will not be accessible on STUINFO during the week following the submission of grades for this course unless the SIRS online form has been filled out. You will have the option on the online SIRS form to decline to participate in the evaluation of the course - we hope, however, that you will be willing to give us your frank and constructive feedback so that we may instruct students even better in the future.

Laptops and Electronic Devices:

Use of laptops is strongly discouraged, however, accommodations can be made in special circumstances. Electronic devices such as tablets and cellphones should not be used during class. **Use of these items WILL result in points being deducted**.

Programmatic Assessment

This course is being evaluated as part of a program assessment. Program assessment provides information about student ideas, attitudes, and behaviors and will be a baseline for future assessment of student learning. Your participation is inherent in your enrollment in this course, although you can request via your course instructor, without penalty, that your course work will be included only in MSU internal reporting documents but not in external dissemination. Otherwise, by participating in this course, you are acknowledging that any course-related material collected can be used anonymously in research publications and presentations. For further information about this study, please contact Dr. Claudia Vergara at vergara@msu.edu or MSU's IRB at irb@msu.edu.

Please see your instructor as soon as possible if you have any disabilities that may need special accommodation.

ASSIGNMENT DUE DATES:

- Your first assignments, **Lab 1: Pre-lab and Post-lab**, are to be completed during lab one.

- **REMINDER: No late assignments will be accepted**. Assignments must be submitted over DESIRE TO LEARN. Assignments are due by class time for the section you are enrolled.