Course Syllabus for SIADS 591/592: Milestone I

Course Overview and Prerequisites

This course has three objectives: (a) test students' knowledge in a comprehensive fashion of the courses listed as prerequisites using a rigorous assessment, (b) create a portfolio project demonstrating skills learned thus far, including data analysis, manipulation, and visualization, and (c) provide a space for students to strengthen their knowledge of previous learning through repeated practice.

The prerequisites for SIADS 591 and 592 include: SIADS 501, 502, 505, 511, 515, 516, 521, and 522

Instructor and Course Assistants

Instructor: Chris Teplovs, Ph.D. Lecturer III in Information and Research Investigator, School of Information

Supporting Course Instructors: Anthony Whyte, Lecturer III in Information, School of Information;

Gabrielle O'Brien, Lecturer in Information, School of Information

Comprehensive Exam Administrative Support: Hasan Tahir (MADS Course Ops)

A specific thank you to Henny Tasker who assisted in the development and design of this course.

Communication Expectations

Slack is the preferred communication tool for this course. If you have questions about course content (e.g. lecture videos or assignments), please make sure to use Slack. Instructor and course assistant response time to Slack messages will be within 24 hours.

Please try to monitor the Slack channel(s) for the course regularly.

Personal communication that may involve sensitive information may be emailed directly to the instructor or course assistant. If you email the instructor or course assistant, please include SIADS591 in the email subject. Instructor and course assistant response time to email messages will be within 24 hours.

Help Desk(s): How to get help
- Degree program questions or general help - umsimadshelp@umich.edu
- Coursera's Technical Support (24/7) - https://learner.coursera.help/

Weekly Readings

There are no weekly readings in this course.

Learning Outcomes

Students will:

1. Have the opportunity to synthesize knowledge, as well as practice tools and techniques that have been covered in the prerequisite courses,
2. Create a project that is suitable for inclusion as part of a professional portfolio, and
3. Be given the opportunity to discuss their progress in data science with a faculty member

Course Schedule

This course begins on Monday, November 23, 2020 and ends on Tuesday, February 2, 2020.

Week	Topic	Video/Resources	Work during the week	Due at end of week
1	Introduction	Video: Welcome to SIADS 591 and 592 - Milestone 1; Video: Introduction to the Project; Reading: SIADS 591 and 592 Project Guidelines; Video: Introduction to Comprehensive Oral Exam; Reading: SIADS 591 and 592 Comprehensive Exam Guidelines	Team formation, exam prep, sign up for exam time	Project Team Formation, Project Topic Selected, Sign-up for Exam Time
2	Collaboration	Video: Collaborative Data Science	Proposal draft, exam prep, sign-up for exam time	Draft Project Proposal
3	Peer Review	None	Exam prep, Peer reviews (2)	Peer Review of Proposals
4	Comprehensive Exams and Revised Project Proposal	Video: Comprehensive Exam Experience	Exam, project work with team	Revised (final) project proposal submitted (PDF submitted via Coursera) for instructor review and feedback
5	Comprehensive Exams and Results	None	Exam, project work with team	View Comprehensive Exam Results from instructor
6	Project	Reading: Continue to work on project	Project work with team	None

| 7 | Project | Reading: Continue to work on project | Project work with team | None |
| 8 | Project | None | Project work with team | Submit Final Project Report (Submitted via Coursera) |

Weekly Office Hours via Zoom (Ann Arbor, Michigan time):

Your instructor will hold weekly, synchronous office hours using the video-conferencing tool, Zoom. The schedule of office hours can be found by clicking on the **Live Events** link in the left-hand navigation menu. Additionally, all office hours will be recorded and archived so that you can retrieve them at a later date. Archived office hours can be found in the respective module or by clicking on the **Resources** link in the left-hand navigation menu then clicking the **Archived Sessions** link.

The supporting instructors will also conduct regularly scheduled Office Hours, which will be conducted in the usual group mode. The instructor will be available via appointment for one-to-one sessions. It is highly recommended that you check in with the instructor at least once every two weeks, either via Slack or Zoom; it is also highly recommended that you check in with the instructor at least once using Zoom before your comprehensive oral exam to ensure you're comfortable with the technology.

Grading and Course Checklist

Course Item	Points	Percentage of Final Grade	Due
Team formation	0	0	Thursday, December 3, 2020
Project topic selected	0	0	Thursday, December 3, 2020
Comprehensive oral exam sign up	0	0	Thursday, December 3, 2020
Draft proposal for peer review	10	6.25	Wednesday, December 9, 2020
Peer reviews (2)	2 x 5 = 10	6.25	Monday, December 13, 2020

Final proposal for instructor review	10	6.25	Sunday, December 20, 2020
Final report	50	31.25	Tuesday, February 3, 2021
Comprehensive oral exam	80	50	Scheduled from Wednesday, January 6, 2021 to Friday, January 15, 2021
Total	160	100%	

Note: All assignments are required to earn credit for this course.

Letter Grades, Course Grades, and Late Submission Policy

We realize that, now more than ever, the occasional crisis might mess up your schedule enough to require a bit of extra time in completing a course assignment. Thus, we have instituted the following late policy that gives you a limited number of flexible "late day" credits.

You have two (2) free late days to use during SIADS 591. One late day equals exactly one 24-hour period after the due date of the assignment (including weekends). No fractional late days: they are all or nothing. Once you have used up your late days, 25% penalty for each subsequent 24-hour period after the deadline that an assignment is late For example, if the due date is 11:59pm Sundays/Tuesday, with no late days left, penalties would be:

Before 5pm Monday/Wednesday: 25% deduction

Before 5pm Tuesday/Thursday: 50% deduction

Before 5pm Wednesday/Friday: 75% deduction

After 5pm Wednesday/Friday: 100% deduction

You don't need to explain or get permission to use late days, and we will track them for you. Note that resubmissions after the deadline will be counted as late submissions. Also, **late days may not be applied to the Final Project Report**.

Please note: Submitting your work on time is very important in this course. Your peers are relying on you to submit your work on time in this course so they can complete their work (in the form of peer reviews). The instructional team will periodically reach out to you and ask you about your progress; if you fall behind your project work you will be overwhelmed and you will be at risk for not succeeding in the course.

The grading scale for this course is as follows:

A+	97%
A	93%
A-	90%
B+	87%

B	83%
B-	80%
C+	77%
C	73%
C-	70%
D+	67%
D	63%
D-	60%
F	0%

Academic Integrity/Code of Conduct

Refer to the Academic and Professional Integrity section of the UMSI Student Handbook. (access to Student Orientation course required).

Accommodations

Refer to the Accommodations for Students with Disabilities section of the UMSI Student Handbook (access to the Student Orientation course required).

Use the Student Intake Form to begin the process of working with the University's Office of Services for Students with Disabilities.

Accessibility

Refer to the Screen reader configuration for Jupyter Notebook Content document to learn accessibility tips for Jupyter Notebooks.

Library Access

Refer to the U-M Library's information sheet on accessing library resources from off-campus. For more information regarding library support services, please refer to the U-M Library Resources section of the UMSI Student Handbook (access to the Student Orientation course required).

Student Mental Health

Refer to the University's Resources for Stress and Mental Health website for a listing of resources for students.

Student Services

Refer to the Introduction to UMSI Student Life section of the UMSI Student Handbook (access to the Student Orientation course required).

Technology Tips

We will be using Slack, Zoom, Google Docs, and Google Sheets to facilitate communication. The comprehensive oral exam will be conducted using Zoom, and your own work on the project will be done in Jupyter.

This course differs from your other MADS courses in many ways including technology. We have created a Jupyter environment for you that is functionally equivalent to SIADS 516, which is a superset of the base MADS environment. You can access that environment via the "ungraded lab assignment" in Coursera. You can use that environment or choose to use any of the environments from courses you have already completed. Alternatively, you can use your own locally installed environment. Another possibility is to use Google Colaboratory, which may facilitate collaboration.

- Working Offline
  - While the Coursera platform has an integrated Jupyter Notebook system, you can work offline on your own computer by installing Python 3.5+ and the Jupyter software packages. For more details, consult the Jupyter Notebook FAQ.