CE 471 Field Practicum

Tentative Fall 2016 Course Syllabus (updated December 18, 2015)

| Instructor | Dr. Leroy Hulsey jlhulsey@alaska.edu |
|------------------------------|---|
| Labs | 3hrs (time and location TBD) |
| Office Hours | (time and location TBD) |
| Catalog Data | CE F471 |
| Course Title | Field Practicum |
| Prerequisites | Senior standing in CEE program or permission of instructor. |
| Catalog Description | Introduction to field data collection techniques used in civil engineering sub- disciplines such as structural, traffic, water, environmental, and materials; preliminary data analysis and descriptive statistics. |
| Credit | 1.00 semester hours |
| Textbook and Readings | There is no required textbook for this course; readings, lab instructions, and instrumentation manuals will be distributed as needed. |
| Course Objectives | Provide students with engineering experience through field and laboratory exercises; engage students with practical collection methods in a real-world environment; strengthen students' ability to work in a team environment. |
| Student Learning Outcomes | Upon completing this course students will be able to apply techniques, skills, and modern engineering tools that are necessary for engineering practice in a real-world setting. |
| Communication | Outside of scheduled lectures & office hours, email is the official form of communication. Students are expected to check their UAF email accounts for course updates as it will be used for general announcements and distribution of course materials as necessary. |

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GradingPass/fail. Students must illustrate their proficiency in field methods and
techniques. Students must obtain a 75% or better to receive a passing grade
and will be evaluated based on the following:

| | 100pts | 50pts | Opts |
|---|--|--|--|
| Attendance/Participation (20%) Must be present at and contribute to all lab/field days unless extenuating circumstances exist | Student participated fully in discussion and activities | Student sometimes showed up to class; was not engaged and often did not participate | Student rarely showed up for class or participated in discussion |
| Team Field Data Collection Assignments (25%) Demonstrates an ability to work in a team environment | Student participated in the assignment and was open to feedback and suggestions from the instructor and fellow students | Student was present of the assignment but did not contribute to the team or hindered field exercise | Student struggled with criticism and feedback, did not communicate well, and did not participate |
| Individual Laboratory Data Processing Assignments (25%) Demonstrates an ability to process field samples and work independently | Evidence of capable field work and goals of the project were met | Student showed some evidence of laboratory and project skills but some critical pieces are missing or incomplete | No or insufficient evidence of capabilities or assignment not completed |
| Lab Reports (30%) Demonstrates an ability to interpret data and present findings in a clear and logical manner | Report was complete, used proper figures and tables, and demonstrated strong communications skills | Report was near- complete but missing some components or has lack of clarity and issues presenting material | Report was mostly incomplete and overall presentation was of poor quality |

Academic Integrity Students are expected to and should strictly comply with UAF's <u>Student Code</u> of <u>Conduct</u>. Offenses against the Code of Academic Integrity and Student Code of Conduct are deemed serious and insult the integrity of the entire academic community. Any suspected violations of the code are taken very seriously. Further university policies addressing plagiarism, fabrication, collusion, and cheating can be found on pp. 50-52 in <u>Academics and Regulations</u>. Any student found violating these codes will be given an automatic failing grade for that assignment. More than one violation will result in a failing grade for the course and will involve disciplinary action.

DisabilitiesIf you have a formal accommodation plan developed in conjunction with the
UAF Center for Health and Counseling office please contact me as soon as
possible at the start of the semester. If you would like to learn more about
your options, these services, or discuss the supports that you need in order to
learn well in this class, please contact the coordinator of Disability Services at
474-5655.

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Support ServicesStudents are encouraged to take advantage of the UAF Writing Center (located
in 801 Gruening) is staffed with English Department teaching assistants and
undergraduate students that can assist you in all phases of the writing process.
In addition, the UAF Math Lab offers advice, tutoring, and assistance for
classes involving mathematics and statistics.

TENTATIVE FALL 2016 SCHEDULE

| Week | Activity / Content |
|------|--|
| 1 | Field Day 1: Asphalt Pavement and Concrete Sampling (Dr. Jenny Liu) |
| 2 | Lab Day 1: Asphalt Pavement and Concrete Sampling (Dr. Jenny Liu) |
| 3 | Field Day 2: Hydrologic Measurements (Dr. Sveta Stuefer) Lab Report 1 Due |
| 4 | Lab Day 2: Hydrologic Measurements (Dr. Sveta Stuefer) |
| 5 | Field Day 3: Groundwater Sampling (Dr. David Barnes) Lab Report 2 Due |
| 6 | Lab Day 3: Groundwater Sampling (Dr. David Barnes) |
| 7 | Field Day 4: Bridge and Structural Health Monitoring (Dr. Il-Sang Ahn) Lab Report 3 Due |
| 8 | Lab Day 4: Bridge and Structural Health Monitoring (Dr. Il-Sang Ahn) |
| 9 | Field Day 5: Traffic Data Collection (Dr. Nathan Belz) Lab Report 4 Due |
| 10 | Lab Day 5: Traffic Data Collection (Dr. Nathan Belz) |
| 11 | Field Day 6: Frozen Soils and Arctic Issues (Dr. Yuri Shur) Lab Report 5 Due |
| 12 | Lab Day 6: Frozen Soils and Arctic Issues (Dr. Yuri Shur) |
| 13 | Field Day 7: Air Quality Measurements (Dr. Srijan Aggarwal) Lab Report 6 Due |
| 14 | Lab Day 7: Air Quality Measurements (Dr. Srijan Aggarwal) |
| 15 | Course Recap / Final Presentations Lab Report 7 Due |