

COURSE AGENDA – Jan. 31-Feb. 3

MIX DESIGN TECHNOLOGIES WORKSHOP

Tuesday – Classroom Session

8:00 Welcome, Safety, & Introductions
All

8:15 Asphalt Materials – Section 1
Mark Blow

9:45 Binder Lab Tour

10:00 **BREAK**

10:15 RAP Binder Recovery, Testing, and Blending Charts – Section 2
Danny Gierhart

11:30 Mix Design and Volumetric Concepts – Section 3
Mark Blow

12:00 **LUNCH**

1:00 Introduction to Aggregate – Section 4
Danny Gierhart

1:45 Aggregate Properties and Criteria – Section 5
Phil Blankenship

2:45 **BREAK**

Tuesday – Laboratory Demonstrations

3:00 Aggregate Testing & Mixing/Mixture Compaction – **Bring Lab Booklet**
Laboratory Staff (4 lab groups, 30 minute rotations)

Group	Coarse Aggregate Specific Gravity	Fine Aggregate Specific Gravity	Demo of Extraction/Recovery	Mixing, Aging, and Gyratory Compaction
1	3:00	3:30	4:00	4:30
2	3:30	4:00	4:30	3:00
3	4:00	4:30	3:00	3:30
4	4:30	3:00	3:30	4:00

Coarse Aggregate Specific Gravity & Sample Reduction (*front of mix lab*) – *Danny Gierhart*

Fine Aggregate Specific Gravity & Sample Reduction (*front of mix lab*) – *Zach McKay*

Demo of Extraction/Recovery (*mix lab*) – *Nicholas Cook*

Mixing, Aging, and Gyratory Compaction (*back of mix lab*) – *Gary Wooldridge*

5:00 **ADJOURN**

Wednesday – Classroom Session

8:00 Aggregate Analysis for Mix Design – Section 6

Mark Blow

9:45 **BREAK**

10:00 HMA Volumetric Analysis – Section 7

Danny Gierhart

12:00 **LUNCH**

1:00 HMA Volumetric Analysis (cont.) – Section 7

Danny Gierhart

1:30 Trial Blend Analysis – Section 8

Mark Blow

2:15 **BREAK**

2:30 Mixture Testing & Performance Tests - **Bring Lab Booklet**

Laboratory Staff (4 lab groups, 30 minute rotations)

Group	Bulk Specific Gravity & Corelok	Splitting & Maximum Specific Gravity	TSR	Performance Tests
1	2:30	3:00	3:30	4:00
2	3:00	3:30	4:00	2:30
3	3:30	4:00	2:30	3:00
4	4:00	2:30	3:00	3:30

Bulk Specific Gravity & Corelok (*front of mix lab*) – *Nicholas Cook*

Maximum Specific Gravity & Sample Reduction (*front of mix lab*) – *Danny Gierhart*

TSR (*back of mix lab*) – *Gary Wooldridge*

Performance Testing (AMPT Modulus & Flow, Beam Fatigue, IDT) – *Zach McKay*

4:30 Mix Design Calculations – Hand out homework for aggregate properties, gradation & mixture design

Phil Blankenship

5:00 **ADJOURN**

Thursday – Classroom Session

- 8:00 Superpave Mix Design and Analysis – Section 9
Danny Gierhart
- 8:45 Moisture Sensitivity Testing: AASHTO T-283 – Section 10
Mark Blow
- 9:30 **BREAK**
- 9:45 Homework Review – (Combined gradations, aggregate calculations, mix volumetrics, batching with RAP)
All

Thursday – Laboratory Demonstrations

- 12:00 **LUNCH**
- 1:00 Reclaimed Asphalt Pavement (RAP) & Recycled Asphalt Shingles (RAS) Mix Design – Section 11
Phil Blankenship
- 2:00 Performance Testing Overview - Section 12
Phil Blankenship
- 2:30 **BREAK**
- 2:45 Designing SMA, OGFC, and WMA Mixtures – Section 13
Phil Blankenship
- 4:00 Final Homework Review and Q & A
- 5:00 **ADJOURN**

Friday – Classroom Session

8:00 Certification Exam
Mike Beavin

12:00 **ADJOURN – End of Examination**