

A202 Syllabus

Spring 2004

Instructor: Konrad Strauss
Telephone: 855-1900
Email: kstrauss@indiana.edu
Office hours: 2:45 – 3:30pm T, R, M255

Lecture: MWF 11:15am-12:05pm M 255
Lab: R. 6:00 – 7:30pm MC 327/M354

Required Texts:
Pohlman: Principles of Digital Audio.
Katz: Mastering Audio
On reserve:
Jim Taylor: DVD demystified
Ralph LeBarge: DVD Authoring & Production

Lecture	Assignment
Week 1	
1/12 Class Introduction: “safe” computing practices, file paths, structure; hard disc usage and protocols	• Katz: Chapters 5,6 & 14
1/14 Digital Audio – Level practices.	
1/16 Introduction to Monitoring	
Lab M354: DM1000 console.	
Week 2	
1/19 No Class – MLK Day	• Katz: Chapters 1 – 4
1/21 Monitoring cont’d	• Homework # 1 (due 1/26)
1/23 Surround sound: Monitoring – Bass Management	
Lab M354: Align monitor system	
Week 3	
1/26 Introduction to Mastering	• Katz: Chapters 7 & 8. Pohlmann: pg. 270 – 275
1/28 Mastering and manufacturing process.	• Homework # 2 (due 2/2)
1/31 Sequencing spacing and leveling	• Mastering Assignment 1 (due 2/5)
Lab M354: Review Sonic	

Week 4

- 2/2 Mastering: EQ concepts • Katz: Chapters 9 –11
2/4 EQ • Homework # 3 (due 2/9)
2/6 EQ • Mastering Assignment # 2 (due 2/12)
Lab M354. Processing in Sonic & effects loop

Week 5

- 2/9 Mastering: compression • Katz: Chapters 12 & 13
2/11 Multiband compression • Homework # 4 (due 2/16)
2/13 Parallel compression • Mastering assignment # 3 (due 2/19)
Lab M354: Compression in S6000

Week 6

- 2/16 Mastering: Advanced concepts - SRC • Katz: Chapters 16, 18 & 19
2/18 Editing • Homework # 5 (due 2/23)
2/20 MS processing • Mastering Assignment # 4 (due 2/26)
Lab M354: MS processing & parallel compression

Week 7

- 2/23 MS processing cont'd • Homework # 6 (due 3/1)
2/25 Delivery • Mastering Assignment # 5 (due 3/11)
2/27 Delivery & documentation
Lab M354. Delivery

Week 8

- 3/1 Review • Taylor pg. 13 “units and notation” –
3/3 Exam # 1 18, 143 – 166, 179 – 210
3/5 No Class
Lab No Lab

Week 9

- 3/8 Introduction to DVD • Taylor, pg. 87 – 142.
3/10 DVD - formats • Homework # 7 (due 3/22)
3/12 DVD formats cont'd, video formats • Derived surround mix (due 3/25)
Lab M354: Deriving a surround mix from a stereo source.

Week 10

- 3/15 **Spring Break**

Week 11

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|------------|---------------------------|--|
| 3/22 | Mpeg compression | • Taylor, pg 494 – 543; LeBarge, pg. 30-36 |
| 3/24 | Mpeg compression cont'd | |
| 3/26 | Audio formats | • Homework # 8 (due 3/29) |
| Lab | Audio & Video compression | |

Week 12

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|------------|--------------------------------|--|
| 3/29 | Audio formats & compression | • Handout – Understanding DVD-Audio; Taylor pg. 320 – 330, |
| 3/31 | DVD – authoring concepts | Pohlman, pg. 295 – 301 |
| 4/2 | DVD – authoring cont'd | • Homework # 9 (due 4/5) |
| Lab | Simple DVD authoring with iDVD | • Authoring project # 1 (due 4/8) |

Week 13

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|------------|-------------------------|--|
| 4/5 | DVD – authoring cont'd | • Handout – Digital TV; Pohlmann, pg. 520 – 536. |
| 4/7 | DVD – audio | |
| 4/9 | DVD-A continued | • Homework # 10 (due 4/12) |
| Lab | DVD authoring with iDVD | • Authoring project # 2 (due 4/15) |

Week 14

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|------------|-------------------------------|------------------------------------|
| 4/12 | SACD | • Reading TBA |
| 4/14 | Audio for Digital Television. | • Homework # 11 (due 4/19) |
| 4/16 | Intro to audio for internet | • Authoring project # 3 (due 4/22) |
| Lab | DVD authoring | |

Week 15

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|------------|---------------------------|-------------------------------------|
| 4/19 | Audio for internet cont'd | • Reading TBA |
| 4/21 | quicktime | • Homework # 12 (due 4/26) |
| 4/23 | WMA & Realaudio | • Audio encoding project (due 4/29) |
| Lab | Audio encoding | |

Week 16

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|------------|--------------------------|--|
| 4/26 | <i>Website authoring</i> | |
| 4/28 | <i>Wrap-up</i> | |
| 4/31 | <i>Review</i> | |
| Lab | <i>No Lab</i> | |

Final Exam:



Assignments:

Mastering Project # 1: Load in and sequence tracks. Place track marks.	Assigned: 1/29 Due: 2/5
Mastering Project # 2: Use EQ to balance the timbre of provided tracks.	Assigned: 2/5 Due: 2/12
Mastering Project # 3: Provide 3 compressed versions of provided tracks, mild, moderate and aggressive. Try to avoid artifacts such as pumping or distortion.	Assigned: 2/12 Due: 2/19
Mastering Project # 4: TBA	Assigned: 2/19 Due: 2/26
Mastering Project # 5: Sequence and master 5 song EP from provided tracks	Assigned: 2/26 Due: 3/11
Derived Surround Mix: Derive a surround mix from a stereo track and record onto provided DA78 tape	Assigned: 3/11 Due: 3/25
Authoring project # 1: TBA	Assigned: 4/1 Due: 4/8
Authoring project # 2: TBA	Assigned: 4/8 Due: 4/15
Authoring project # 3: TBA	Assigned: 4/15 Due: 4/22
Audio Encoding Project: TBA	Assigned: 4/22 Due: 4/29

Reading

	Assigned:
Katz: Chapters 5,6 & 14	1/12/03
Katz: Chapters 1 – 4	1/19/03
Katz: Chapters 7 & 8. Pohlmann: pg. 270 – 275	1/26/03
Katz: Chapters 9 –11	2/2/03
Katz: Chapters 12 & 13	2/9/03

Katz: Chapters 16, 18 & 19	2/16/03
Taylor pg. 13 “units and notation” – 18, 143 – 166, 179 – 210	3/1/03
Taylor, pg. 87 – 142.	3/8/03
Taylor, pg 494 – 543; LeBarge, pg. 30-36	3/22/03
Handout – Understanding DVD-Audio, Taylor pg. 320 – 330, Pohlman, pg. 295 – 301	3/29/03
Handout – Digital TV; Pohlmann, pg. 520 – 536.	4/5/03



Grading: Assignments: 50%, Exams: 40%, Class Participation/instructor discretion: 10%.

Attendance: Attendance is required. One unexcused absence will be allowed. A penalty of 1/2 letter grade per class or lab will be assessed for any further unexcused absences. Please come to class on time. Two tardies count as one absence. I take attendance at the beginning of class, If you are late it is your responsibility to make sure I have marked you present.

Assignments: Assignments must be handed in on time. Late assignments will be accepted but a penalty of 10 % per week will be assessed. All assignments and their due dates are listed in this syllabus. I will try to remind you when the assignments are due, but it is your responsibility to meet all deadlines.

Reading: Reading must be completed during the week it has been assigned.