

## FU/BEST Program

**Name:** Dr. Hilary Baker  
**Email address:** fubest@fu-berlin.de  
**Course title:** Music in the Digital Age  
**Course number:** FU-BEST 29  
**Language of instruction:** English  
**Contact hours:** 45  
**ECTS-Credits:** 5 **U.S. semester credits:** 3

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### Course description

From virtual instruments to illegal downloads, recent decades have seen the landmark effects of digital technology on the production and dissemination of musical content. In this course, we will examine the nature of these shifts and sample salient and productive intersections of music and technology in transatlantic contexts. Through specific case studies, we will tackle the following questions: How have these technologies encouraged unprecedented modes of hearing and acquiring music? In what ways has digital music technology enabled personal and communal experiences with musical content and style? And how do we reconcile the long-established connections between music and place in an era when music seems to exist largely in “the cloud?”

The first unit of the course will examine the nature of experiencing music in the digital era. We start with recent shifts in how music is made available to audiences, including the transition from analog to digital recording formats, and the subsequent legal impacts of digital distribution. Next, we consider the (surprising) financial growth of live performance in the contemporary global popular music industry, and the recent development of music tourism in sites such as the UK and Berlin. Many of the case studies in this unit will be drawn from the popular music produced in Europe and the United States. This unit will end with a consideration of digitally mediated experiences of Western classical music, such as the *Berliner Philharmoniker's* Digital Concert Hall. This will allow us to consider how the application of “new” digital media can reinvigorate musical traditions that have existed since long before the digital age.

Our second unit will explore the manner in which musicians and producers have employed digital tools to develop new industry standards. In particular, we will consider the development and applications of salient music technologies (both analog and digital) such as the microphone, electric guitar, synthesizer, and DAWs (Digital Audio Workstations). In addition, we will consider the rise and fall of the music

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recording studio, alongside the increasing popularity of DIY (“do-it-yourself”) music production. Furthermore, we sample newly developed technologies and experiments from companies such as Berlin-based Native Instruments and consider the impact of these technologies on the development of personal style in music-making (specifically in electronic dance music and laptop DJ performances).

Our third goal will be to consider the manner in which digital music technologies have been applied to media outside of the mainstream music industry. This unit will allow us to understand the broader repercussions of the digital era on the contemporary experience of sound and music. Specific topics include the digital production of sound and music produced for film, the use of music in video games (a fundamentally digital form that is currently the highest-grossing segment of the popular culture industry), and sound art, which is the often avant-garde fusion of sound, technology and gallery art. Overall, this unit will illustrate the creative and cutting-edge applications of digital music technologies. The semester will end with a discussion of the current state of music technology and collective theorization and speculation of where the industry might be headed next.

Throughout the semester, we will consider how these technological shifts have encouraged and enabled a globalized reception of music that simultaneously hinges on the role of geographic centers. Berlin will serve as our primary example of this, as it is a well-respected center of multiple musical scenes (including classical and electronic dance music) that participates in a globalized mainstream music industry. Thus, our discussions of these topics will often reference musical movements, companies, and technologies associated with Berlin (and elsewhere), but we will situate these topics within the broader transatlantic music industry.

### **Student profile**

Second-semester sophomore or above

### **Prerequisites**

None

### **Course Requirements**

Midterm exam: 25%

Term-Paper: 25%

Final exam: 25%

Class participation (includes 1 Independent Project report): 25%

### **Literature**

Photocopied course reader.

Readings in the course reader will be drawn from scholarly and journalistic sources, such as Wikström’s *The Music Industry: Music in the Cloud* (Cambridge: Polity Press, 2013), David’s *Peer to Peer and the Music Industry: The Criminalization of Sharing* (London: Sage Publications Ltd, 2010), and Hegarty’s *Noise Music: A History* (New York: Continuum, 2007).

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### Course schedule

Sessions	Topics, Readings, etc.
Session 1	<p><i>Unit: Experiencing Music in the Digital Age</i></p> <p><b>Topic: Significant modes of music dissemination, from oral traditions to copyright industries</b></p> <p><b>Case Studies: “Global” pop music in Sweden, the US, France, Italy, the UK, and Germany (<i>Pop Idol</i>, NIN, Daft Punk, Giorgio Moroder, etc.)</b></p> <p><b>Reading:</b> Introduction and “A Copyright Industry” from Wikström’s <i>The Music Industry: Music in the Cloud</i> (2013), pages 1-45.</p> <p><b>Recommended Reading:</b> “Inside the Music Industry,” from Wikström’s <i>The Music Industry: Music in the Cloud</i> (2013), pages 46-85.</p>
Session 2	<p><i>Unit: Experiencing Music in the Digital Age</i></p> <p><b>Topic: Fair sharing or illegal piracy? What are the issues inherent to music distribution in a contemporary online and globalized context?</b></p> <p><b>Case Studies: Key past models such as Napster, iTunes, Kazaa compared with the cutting edge transatlantic service SoundCloud (headquarters in Berlin, with offices in NYC, San Francisco, and London)</b></p> <p><b>Reading:</b> “The Social and Creative Music Fan” from Wikström’s <i>The Music Industry</i> (2013), pages 149-171.</p> <p>“File Sharing: A Brief History” from David’s <i>Peer to Peer and the Music Industry: The Criminalization of Sharing</i> (2010), pages 29-41.</p>
Session 3	<p><i>Unit: Experiencing Music in the Digital Age</i></p> <p><b>Topic: How does the intersection of space, sound, and technology inform our contemporary experiences with live popular music? How has this intersection generated a</b></p>

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	<p><b>music-tourism industry in Europe?</b></p> <p><b>Case Studies: History and current state of Berlin’s techno scene, music festival tourism in Spain, the UK, and Poland</b></p> <p><b>Reading:</b> Excerpts from Rapp’s <i>Lost and Sound: Berlin, Techno, and the Easyjetset</i> (2010)</p> <p>Grose, “Live, at a Field Near You: Why the Music Industry is Singing a Happy Tune” in <i>Time Europe</i> (2011)</p> <p>Kim, “Boom Boom Boom: Techno in Germany after the Wall,” published online by the <i>Goethe Institut</i> (2009)</p> <p>Hanke, “Clubmetropole Berlin,” published online by the <i>Goethe Institut</i> (2008)</p>
<p><b>Session 4</b></p>	<p><i>Unit: Experiencing Music in the Digital Age</i></p> <p><b>Topic: How has technology been used to promote an interest in, and to create new ways of encountering classical music?</b></p> <p><b>Case Studies: Berliner Philharmoniker’s Digital Concert Hall and The Met Opera Live in HD compared with various classical music organizations in Germany, Austria, and the UK</b></p> <p><b>Reading:</b> Luce, "Can the Web Save Classical Music?" from Crosscut.com (Online News Source in Seattle, WA – 2009)</p> <p>Smith, "Respecting the Invisible Curtain: Marketing Artists in the Digital Age" from pcms.com (Philadelphia Chamber Music Society -2012)</p> <p>Barry, "Listening to Classical Music in the Digital Age" from ttutheory.com (Academic Music Theory Blog – 2013).</p>
<p><b>Session 5</b></p>	<p><i>Unit: Making Music in the Digital Age</i></p> <p><b>Topic: Contextualizing the technology of music making – from microphones to Moogs</b></p> <p><b>Case Studies: The transatlantic exchange of</b></p>

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	<p><b>music technology (early development of the microphone, synthesizers in France, the US, and Germany), the guitar as an example of the associations between instruments, musical style, and place</b></p> <p><b>Reading:</b> Robjohns, “A Brief History of Microphones” from microphone-data.com (An archive of industry specialist articles), (2010), pages 1-7.</p> <p>Millard, “Playing with Power: Technology, Modernity, and the Electric Guitar” from <i>The Electric Guitar: A History of An American Icon</i> (ed. Millard, 2004), pages 123-142.</p> <p>Selections from “Trendsetting All-Stars” in Vail’s <i>The Synthesizer: A Comprehensive Guide to Understanding, Playing, and Recording the Ultimate Electronic Music Instrument</i> (2014)</p>
<b>Session 6</b>	<b>Midterm Exam</b>
<b>Session 7</b>	<p><i>Unit: Making Music in the Digital Age</i></p> <p><b>Topic: Technology and Music Production – The history and evolution of Recording Studios</b></p> <p><b>Case Studies: The history and development of the recording studio with a focus on the iconic Abbey Road studio in the UK, contrasted with the increasing popularity of small-scale, home-based music production</b></p> <p><b>Reading:</b> Selections from the chapters “Before Abbey Road,” “The 1960s Science of Sound” and “Experimentation and Innovation” from Lawrence’s <i>Abbey Road: The Best Studio in the World</i> (2012)</p> <p>“Making Music” from Wikström’s <i>The Music Industry</i> (2013), pages 122-148.</p>
<b>Session 8</b>	<p><i>Unit: Making Music in the Digital Age</i></p> <p><b>Topic: The current state of music production technology – what tools are available and how are they employed? How have these tools informed the creation of musical style and voice?</b></p>

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	<p><b>Case Studies:</b> The composition and performance of electronic dance music in Europe, Icelandic artist Björk’s “app album,” and important leaders in contemporary music technology such as Berlin-based companies Native Instruments and Ableton</p> <p><b>Reading:</b> Butler, “Looking for the Perfect Loop: Musical Technologies of Mediated Improvisation” from <i>Playing with Something that Runs: Technology, Improvisation, and Composition in DJ and Laptop Performance</i> (2014), pages 173-228.</p> <p>Dibben, “Visualizing the App Album with Björk’s Biophilia” from <i>The Oxford Handbook of Sound and Image in Digital Media</i> (2013), pages 682-706.</p> <p>“The World of Native Instruments” from <i>The Future of Sound: 15 Years of Native Instruments</i> (2011), pages 8-31.</p>
<p><b>Session 9</b></p>	<p><i>Unit: Using Music in the Digital Age – Applications of Music/Sound Technology in Multimedia</i></p> <p><b>Topic:</b> What are some ways in which technologies employed for the production and dissemination of music are also used for the creation of other forms of contemporary entertainment, such as TV and film?</p> <p><b>Case Studies:</b> Digital sound as a crucial component of film and TV including a discussion of production and post-production techniques, as well as the use of this technology in the German dubbing industry</p> <p><b>Reading:</b> “Music and Film Sound Today” and afterword from Buhler, Neumeyer, and Deemer, <i>Hearing the Movies: Music and Sound in Film History</i> (2009), pages 392-424.</p> <p>Whittington, “Lost in Sensation: Reevaluating the Role of Cinematic Sound in the Digital Age” in <i>The Oxford Handbook of Sound and Image in Digital Media</i> (2013), pages 61-76.</p> <p>Meyer-Dinkgräfe, “Dubbing practice in Germany: Procedures and Aesthetic Implications” from</p>

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	filmsound.org
<p><b>Session 10</b></p>	<p><i>Unit: Using Music in the Digital Age– Applications of Music/Sound Technology in Multimedia</i></p> <p><b>Topic: Bits and Bytes – Music as a crucial component of the largest segment of the entertainment industry – video games (both indie and mainstream)</b></p> <p><b>Case Studies: Comparison of the production of sound for films and video games with a focus on the experience of dynamic audio, the transatlantic nature of the video game industry, and a survey of creative collaborations between video game designers and musical artists (examples drawn from Canada, US, and Poland)</b></p> <p><b>Reading:</b> Sadoff, “Scoring for Film and Video Games: Collaborative Practices and Digital Post-Production” in <i>The Oxford Handbook of Sound and Image in Digital Media</i> (2013), pages 663-681.</p> <p>Miller, “Virtual and Visceral Experience in Music-Oriented Video Games” in <i>The Oxford Handbook of Sound and Image in Digital Media</i> (2013), pages 517-533.</p> <p>McCarter, “Small Communities, Big Ideas” in <i>Kill Screen</i>, vol. 1, issue 5 (Fall 2011), pages 78-82.</p>
<p><b>Session 11</b></p>	<p><i>Unit: Using Music in the Digital Age – Applications of Digital Music/Sound Technology in Multimedia</i></p> <p><b>Topic: Sound Art – A contemporary (and often technological) intersection of the visual art and classical music realms</b></p> <p><b>Case Studies: Placing sound art in music and art history (comparisons with Cage, etc.), Germany (and specifically Berlin) as a center of the sound art world, use of repurposed spaces to house sound art installations</b></p> <p><b>Reading:</b> Hoesen and Perrotte, "Sound Art: New Only in Name" from <i>Germany in the Loud Twentieth Century</i> (Feiereisen and Hills, eds.) – pages 141-154.</p>

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	"First" from Hegarty, <i>Noise Music: A History</i> (pages 1-20).
<b>Session 12</b>	<p><i>Unit: Course Conclusion</i></p> <p><b>Topic: Where do we go from here? Projections of the future of digital technology and music.</b></p> <p><b>Reading:</b> Readings drawn from contemporary publications and journalistic sources on the current state of digital media, music production, and the music industry (distributed to the class during Session 11).</p>
<b>Session 13</b>	<b>Final Exam</b>