



LEARNING ABROAD CENTER

UNIVERSITY OF MINNESOTA

Leonardo da Vinci: Between Art & Science, History & Myth

Course Details

Course Designator & Number: HSEM 3072H

Number of Credits: 3

Language of Instruction: English

Contact Hours: 922 Heller Hall (by appointment); email: jbshank@umn.edu

Instructor: JB Shank

Course Description

This course is designed to introduce students to Leonardo da Vinci the historical man, and to his rich body of work produced during his lifetime from 1462–1519. It is also designed to consider as well how a mythic understanding of Leonardo da Vinci was also fashioned from this same historical foundation, turning him into an almost supernatural icon of the universal creative genius. Especially noteworthy in the mythic idea of Leonardo is his seeming transcendence of the imagined “two cultures” divide between the arts and the sciences, and his identity as a virtuoso artist in multiple domains simultaneously (painting, sculpture, architecture, and the visual arts overall) a pioneering figure in science, engineering, and the history of technology in fields ranging from anatomy to hydraulics and engineering to physics. How, this course will ask, did each of these aspects of Leonardo’s work come to be a part of his historical life and accomplishments, and how after his death was his fully historical life and work refashioned into our contemporary myth historical understanding of Leonardo as a singular universal genius and seemingly supernatural “Renaissance Man”?

The course will pursue these topics in three parts. Part I (Weeks 1–7) will be devoted to the historical Leonardo, and during spring break (March 3–12) we will pursue Part II by traveling to Italy to experience Leonardo’s Italy as it exists today, and to start connecting the historical life with the imagined legacy of it. In Part III (weeks 12–15), we will consider the invention of the

mythistory of Leonardo in the centuries after his death, especially the forging in the modern era (after 1870) of his contemporary identity as a seemingly magical and superhuman creative genius who defies interpretation in ordinary historical terms.

LE Certification: Arts & Humanities Core, and Technology & Society Theme

At the University of Minnesota **Arts/Humanities core courses** “explore the ways art derives its value from various histories and perspectives.” In these LE certified courses, “you will develop skills of thoughtful analysis, flexibility, and ingenuity in problem solving” while initiating “a lasting connection to the arts as a creator, viewer, or participant.” In **Technology and Society theme courses**, students “consider the impact of technology on society as well as how society has shaped, used, and responded to new technology.” They are also “introduced to a broad range of perspectives on the adoption and use of certain technologies.” Since Leonardo was a prolific and innovative artist and humanist, and also a technologist who transformed his own times and later centuries through his technological imaginings, inventions, and labors, his life and legacy seamlessly merges the mission of these two liberal education goals. This course will therefore move continuously between Leonardo’s art and its sources and influence in the society he lived in as well as in later centuries, and also the social origins of his science and technology in Renaissance Italy, along with its impact in his times and its continuing influence today. Ultimately, this course will offer students a case history for thinking not only about the arts and humanities and technology and society as they interacted in Renaissance Italy, but also an introduction into how through the model of Leonardo we should assess overall the relation between art and the humanities and science and technology in our own 21st-Century society.

Required Readings/Materials

The following texts will be read in their entirety (or almost their entirety) as part of this course, and each will be available for purchase at the University Bookstore:

- John Brewer, *The American Leonardo: A Tale of Obsession, Art, and Money* (Oxford University Press, 2009. ISBN: 978-0195396904)
- Ross King, *Brunelleschi’s Dome. How a Renaissance Genius Reinvented Architecture* (Penguin, 2000. ISBN: 978-0142000151)
- *Leonardo da Vinci: Notebooks* (Oxford World Classics, 2008. ISBN: 978- 0199299027)
- Roger D. Masters, *Fortune is a River. Leonardo da Vinci and Niccolò Machiavelli’s Magnificent Dream to Change the Course of Florentine History* (Plume, 1999. ISBN: 978-0452280908)
- Charles Nicholl, *Leonardo da Vinci: Flights of the Mind. A Biography* (Penguin, 2005. ISBN: 978-0143036128)

- R.A. Scotti, *Vanished Smile: The Mysterious Theft of Mona Lisa* (Alfred A. Knopf, 2009. ISBN: 978-0307278388)

Other required readings (labeled “Canvas” on this print syllabus) will be available for digital reading and download at the course Canvas site: canvas.umn.edu/courses

Grading

Grading Rubric

Letter Grade	Score or Percentage	Description
A	93–100	Achievement that is outstanding relative to the level necessary to meet course requirements.
A-	90–92	Achievement that is significantly above the level necessary to meet course requirements.
B+	87–89	
B	83–86	
B-	80–82	Achievement that meets the course requirements in every respect.
C+	77–79	
C	73–76	
C-	70–72	Achievement that is worthy of credit even though it fails to fully meet the course requirements.
D+	67–69	
D	60–66	
F	0–59	Represents failure (or no credit) and signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an I.

Summary of How Grades Are Weighted

Assignments	Percentage of Grade
Mid-term exam	15%
Mid-term essay	20%
Final research paper project	35%
Class participation	30%
Overall grade	100%



Course Content

Mid-Term Exam (to be completed on Canvas before the end of the day on Saturday, March 4) – A multiple-choice question examination evaluating your mastery of the readings and discussions of the first seven weeks of the course.

Mid-Term Essay (due by the end of the day on Friday March 17) – You will be assigned a very short biography of Leonardo da Vinci to read (under 100 pp. in length). In an essay of 2,000 words (ca 6 pp.), you will be asked to respond directly to the following questions: 1.) What do you like about this biography and its framing of Leonardo da Vinci's life and legacy (500 words, or ca. 1.5 pp.)? 2.) What are the problems you see with this biography and its framing of Leonardo da Vinci's life and legacy (500 words, or ca. 1.5 pp.)? 3.) If you were to write your own very short account of Leonardo da Vinci's life and legacy, what would you choose to emphasize (1000 words, or ca. 3 pp.). Include in the last section a brief outline of the specific biographical events and topics you would emphasize, and in all three sections be sure to cite directly (with footnotes) other authors and texts from the course syllabus that support your critical perspective and biographic agenda.

Final Research Paper (due before 4 p.m. on Wednesday May 10) – A final research paper of 3000 words (ca. 10 typed pages) pursuing an individual research question of your own choosing is required. You will develop your own paper project after spring break, and in the final weeks of the semester you will present a 10- to 15-minute presentation of your paper project to the class. Creative papers that explore personal interests will be encouraged, but each successful research paper, no matter what the project, will adhere to the following general guidelines:

- It will meet the paper requirements regarding length and substance;

- It will engage concretely and analytically with the life and legacy of Leonardo da Vinci in some substantial and direct way;
- It will develop ideas suggested or framed by the course syllabus but not literally contained in it (in short, these are not reports or final exam essays but individual research papers that ask you to move beyond the literal content of the course syllabus to further explore and develop ideas triggered by the course readings and discussions);
- It will develop a thesis, or other analytical and/or creative agenda of your own choosing, and examine that theme and critical agenda throughout the paper.

Your final research paper will be most successful if it grows out of sincere personal interests provoked during the course, so I encourage you to start thinking about your final paper as soon as possible, and to discuss with me early and often your potential paper ideas, including the inchoate and half-baked ones.

Note the paper due dates in advance to plan for any conflicts with other assignments you may have in other courses. If you do not turn in a required paper before the assigned due date, it will be considered a **late paper**. Grades will be lowered on late papers and after a certain time they will not be accepted at all. **Extensions** will *not* be given unless you have a serious medical problem, and **incompletes** will only be allowed in rare and extreme circumstances. Also note that **completing all required papers is necessary for passing the course**. In other words, failure to complete a required paper will result in a failing grade for the course no matter what your overall grade average is. In short, if you want to pass the course, you must complete and turn in every required assignment.

Class Participation - Attentive participation in seminar, serious study of the course texts and films, and vigorous seminar discussion will constitute the primary activity of this course. As a result, class participation as a whole will count 30% toward your semester grade. **Regular attendance** will count for 10% of your final grade, and **vigorous class participation** (explained below) will count for 20%. In addition to regular preparation and participation in weekly seminar discussions, you may also be asked to complete small assignments each week or to prepare for class in certain ways. Each of these assignments will be explained beforehand, and all of this work is required and will be assessed when assigning your overall class participation grade. For HSEM 3072H – Leonardo da Vinci: Between Art & Science, History & Myth, each of you will be required to start one seminar with a brief summary of that day's assigned readings and to offer some discussion prompts to start the class. You may also be asked to complete a short writing assignment or worksheet before the seminar, or to post something to a discussion forum on the course Canvas site. If you are absent and are not able to present a short assignment in class, it is your responsibility to arrange for a makeup of this missed work.

Overall, your **class participation grade** will derive from the following:

- Regular preparation for class, including bringing the required texts, supplies, and assignments with you;
- Serious prior study of the assigned course readings;
- A sustained effort at contributing to class discussions through visible attention, helpful questions and worthwhile insights into the issues being discussed;
- Thorough and thoughtful completion of all assigned class assignments.

You can use the **self-assessment questionnaire** below to understand how you are doing as a class participant. Consider it from time to time as we go through the course and feel free to share your evaluation with me (this is not necessary, but always welcome):

- Are you prepared for our discussions? Have you read the assigned texts carefully and thoroughly? Do you come to class with issues to raise in discussion?
- Do you participate regularly? Energetically? Do you participate actively in group activities?
- Do you listen to your fellow students and respond to them? Do you ask them questions?
- Do your interventions spark our discussion? Raise significant questions? Challenge our understanding of the texts? Offer insightful and unexpected reactions to discussions?
- How does your participation compare to that of other students? Are you a class leader or a follower? Do you try to take responsibility for what happens in class?

Use the guidelines below to determine **what grade you would give yourself for class participation**:

A participation grade falls in the "C" range if the student meets the basic requirements of the course: you are present, are usually prepared, and participate once in a while but not regularly. Your contributions relate to the texts and offer some insightful ideas, but they rarely facilitate a discussion. You are an attentive listener.

A participation grade falls in the "B" range if the student is involved and motivated in more than the required way: you are always present, well prepared, contribute quite regularly by sharing your insights. Your contributions show that you are familiar with the material. You have good ideas and share them with others. You also refer to materials discussed in class and to the text, and show interest in the contributions of other students. You listen to what others say and occasionally try to respond to their ideas. You help to create a welcoming atmosphere for everyone's ideas.

A participation grade falls in the "A" range if the student not only participates regularly but also consistently and actively encourages the flow and substance of discussion. You are not only well-prepared, but you also have thoughts about the texts that go beyond a basic understanding of the work. You also take responsibility for creating and maintaining a stimulating discussion each week. You are eager to share your ideas with others, and active in your listening and reactions to other students' comments. Your ideas are critical and stimulate our discussion. When there is a silence or lull in the conversation, you work hard to move discussion in a new direction. You are aware of your role in encouraging other students and you work hard to make classroom discussions an interactive conversation not just a forum for announcing viewpoints. You help to create a welcoming atmosphere for people's ideas and you listen actively.

Course Content

Part I—Becoming Leonardo: A Renaissance Life

Unit 1

- Tue., Jan. 17: Reading:
 - Nicholl, Leonardo: *Flights of the Mind*, “Authors Note” and “Introduction,” pp. xiii-xiv and 1-13
 - *Leonardo Notebooks*, “Preface,” “Introduction,” and “Note on the Text,” pp. v-xxxv
 - Giorgio Vasari, “Preface to the Third Part” and “The Life of Leonardo da Vinci,” from *Lives of the Most Excellent Painters, Sculptors, and Architects* (1555) CANVAS
- Thu., Jan. 19: Reading:
 - Nicholl, Leonardo: *Flights of the Mind*, Part I, pp. 17-58

Unit 2

- Tue., Jan. 24: Reading:
 - King, *Brunelleschi’s Dome*, Chs. 1-10, pp. 1-90
- Thu., Jan. 26: Reading:
 - King, *Brunelleschi’s Dome*, Chs. 11-19, pp. 91-168

Unit 3

- Tue., Jan. 24: Reading:
 - Nicholl, *Leonardo: Flights of the Mind*, Part II, pp. 61-127
- Thu., Feb. 2: Reading:
 - Nicholl, *Leonardo: Flights of the Mind*, Part III, pp. 131-182

Unit 4

- Tue., Feb. 7: Reading:
 - Nicholl, *Leonardo: Flights of the Mind*, Part IV, pp. 185-253
- Thu., Feb. 9: Reading:
 - Nicholl, *Leonardo: Flights of the Mind*, Part V, pp. 257-322

Unit 5

- Tue., Feb. 14: Reading:
 - Nicholl, *Leonardo: Flights of the Mind*, Part VI, pp. 325-399
- Thu., Feb. 16: Reading:

- Masters, *Fortune is a River*

Unit 6

- Tue., Feb. 21: Reading:
 - Masters, *Fortune is a River*
- Thu., Feb. 23: Reading:
 - Nicholl, *Leonardo: Flights of the Mind*, Part VII, pp. 403-453

Unit 7

- Tue., Feb. 28: Reading:
 - Nicholl, Leonardo: *Flights of the Mind*, Part VIII, pp. 457-502
- Thu., Mar. 2: Visit to [Wangensteen Historical Bio-Medical Library](#) ***
- Reading:
 - Leonardo da Vinci Notebooks, Part I “True Science” and Part VI “Reflections on Life,” pp. 3-13, 257-268

Part II—Leonardo in Italy Today

Unit 8

Spring Break—Travel to Italy

- **Fri., Mar. 3:** Flight from MSP Airport to Florence Peretola Airport.
- *** Be sure to pack and bring with you your copies of ***
 - John Brewer, *The American Leonardo: A Tale of Obsession, Art, and Money* (Oxford University Press, 2009. ISBN: 978-0195396904)
 - *Leonardo da Vinci: Notebooks* (Oxford World Classics, 2008. ISBN: 978-0199299027)
 - R.A. Scotti, *Vanished Smile: The Mysterious Theft of Mona Lisa* (Alfred A.Knopf, 2009. ISBN: 978-0307278388)
- **Sat., Mar. 4:** Arrival in Florence, check in to residence. Welcome Dinner, 7 p.m..
Deadline to Complete Mid-Term Exam on Canvas
- **Sun., Mar. 5:** AM: Visit to Vinci; PM: Visit to the Colossus of the Apennines at the old Medici Villa Pratolino, and a short walking tour of Florence
- **Mon., Mar. 6:** Val di Chiana, with excursion to the source of the Arno and Tiber rivers, and the town of Borgo San Sepolcro, home of Luca Pacioli and Piero della Francesca
 - Reading: *Leonardo da Vinci: Notebooks*, Part II “The Universe,” pp. 14-82
- **Tue., Mar. 7:** AM: 9-10 AM, screening of film *Per Firenze* (1966), and then Cathedral of Florence (*Il Duomo*), and the Museo dell’Opera del Duomo; PM: Palazzo Vecchio
- **Wed., Mar. 8:** AM: Galleria degli Uffizi; PM: Museo Galileo
- **Thu., Mar. 9:** AM Train to Milan, check in at residence; PM: Accademia Ambrosiana
- **Fri., Mar. 10:** AM: Museo Cenacolo Vinciano with *The Last Supper*; PM: Palazzo Réale
- **Sat., Mar. 11:** AM: Castello Sforzesco; PM: Casa Leonardo, and Farewell Dinner, 7 p.m.

- Sun., Mar. 12: Flight from Milan Malpensa Airport to MSP Airport

Unit 9 *** NO CLASS ***

- Fri., Mar. 17: **Mid-Term Essay Due**

Unit 10 *** NO CLASS ***

Unit 11 *** NO CLASS ***

- Tue., Mar. 28: *** NO CLASS ***

Part III—Inventing Leonardo between History & Myth

- Thu., Mar. 30: *** [Visit to Anderson Rare Books Library](#) ***
- Reading:
 - *Leonardo da Vinci Notebooks*, Part IV “The Arts,” pp. 102-214

Unit 12

- Tue., Apr. 4: Reading:
 - *Leonardo da Vinci Notebooks*, Part III “Flight,” pp. 83-101
 - Sigmund Freud, *Leonardo da Vinci: A Psychoanalytic Study* (1913)
- Thu., Apr. 6: Reading:
 - Scotti, *Vanished Smile*, pp. 1-118.

Unit 13

- Tue., Apr. 11: Reading:
 - Scotti, *Vanished Smile*, pp. 119-228
- Thu., Apr. 13: Reading:
 - Brewer, *The American Leonardo*, “Introduction” and Chs. 1-6, pp. 1-162

Unit 14

- Tue., Apr. 18: Reading:
 - Brewer, *The American Leonardo*, Chs. 7-10 and “Afterword,” pp. 163-298

- Thu., Apr. 20: Required Viewing:
 - *The Lost Leonardo* (Sony Pictures, 2021). [Trailer](#)

Unit 15

- Tue., Apr. 25: *** Student Presentations of Final Paper Projects ***
- Thu., Apr. 27: *** Student Presentations of Final Paper Projects ***

Unit 16 *** NO CLASS ***

Unit 17

- *** Final Research Paper Due – Wednesday, May 10, before 4 p.m. ***

Policies

Attendance Policy

Students are expected to be on time and attend all classes while abroad. Many instructors assess both attendance and participation when assigning a final course grade. Attendance alone does not guarantee a positive participation grade; the student should be prepared for class and engage in class discussion. See the on-site syllabus for specific class requirements.

Attendance at every class is required and will be graded as part of your class participation grade (see above). Problems do arise, however, and I ask that you notify me in advance (or even after the fact, if it is appropriate) about why you are unable to attend any class meeting. Of course, unforeseen problems do arise and you may need to miss class unexpectedly. This need not be a problem. But ***after your second absence from class your grade for attendance will be lowered.*** If forces beyond your control (e.g., required university commitments, legitimate illness, or unforeseen emergencies) do force you to miss more than one class, opportunities for make-up work will be available. It is your responsibility to inquire about these opportunities and to take advantage of

them. If you miss class, it is your responsibility to determine what assignment you may have missed and make arrangements to complete it in a timely fashion. Feel free to contact me directly if you feel you may have missed something.

University of Minnesota Policies & Procedures

Academic integrity is essential to a positive teaching and learning environment. All students enrolled in University courses are expected to complete coursework responsibilities with fairness and honesty. Failure to do so by seeking unfair advantage over others or misrepresenting someone else's work as your own can result in disciplinary action. The University Student Conduct Code defines scholastic dishonesty as follows:

Scholastic Dishonesty

Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering forging, or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis.

Within this course, a student responsible for scholastic dishonesty can be assigned a penalty up to and including an "F" or "N" for the course. If you have any questions regarding the expectations for a specific assignment or exam, ask.

Student Conduct

The University of Minnesota has specific policies concerning student conduct. This information can be found [on the Learning Abroad Center website](#).