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APICIUS – INTERNATIONAL SCHOOL OF HOSPITALITY  
SAS - SCHOOL OF ARTS AND SCIENCES

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**SCHOOL OF LIBERAL ARTS / FOOD AND WINE STUDIES**  
**DEPARTMENT OF ART HISTORY / HISTORY / PHILOSOPHY / FOOD AND CULTURE**  
**COURSE TITLE: Leonardo Da Vinci: Art, Botany, Alchemy, and Recipes**  
**COURSE CODE: LAAHLV260 / LAHSLV260 / LAPLLV260 / FWFCLV260**

**1. DESCRIPTION**

3 semester credits. The genius of Leonardo Da Vinci is boundless and this course introduces students to his universal genius through an overview of his life, art, and his remarkable approach to the exploration of nature. Centuries before the scientific method of investigation became a standard for philosophers and scientists, Leonardo had already developed the essential characteristics that are still a part of the methodology today. Yet, his experiential and interdisciplinary approach to the world around him is still a mystery that continues to inspire current generations with the challenge to unveil the layers of his creative powers. In this course, students will have the opportunity to investigate Leonardo's intellectual evolution, his interest in botanical studies, and his quest to discover the secrets of nature that allowed him to become a master and inspiration of Renaissance art. Leonardo's unique path will be analyzed through a focus on his youth in Florence, his artistic career in Milan and France and the legacy of his masters, with investigation of his anatomical dissections and the inventions of extraordinary machines, as well as his approach to the mysteries of alchemy and some of his lesser-known interests. Not everybody knows that Leonardo's genius also involved the study of table manners, the creation of kitchen utensils, and the planning of pioneering kitchen devices that will also be experimented in this course. Discussions on Leonardo's various studies and their outcomes, guided visits in locations related to his artistic and scientific vocation, field learning activities, and a series of practical workshops on recipes written and inspired by Leonardo's eclecticism will provide the tools to construct a comprehensive understanding of the man behind the genius. This class includes experiential learning with CEMI.

**2. OBJECTIVES**

Upon successful completion of this course, students will:

- Learn the groundbreaking scientific ideas and researches developed by the Renaissance artist Leonardo Da Vinci during his life with a focus on the fields of botany and alchemy.
- Familiarize with the main aspects and complexity of the Renaissance culture, art, and society in Italy.
- Understand Leonardo's art from a different perspective.
- Acquire a gastronomic background of Leonardo da Vinci and how it influenced his approach to food.
- Understand Leonardo's obsession for geometry, efficiency, and organization in the kitchen.

- Examine the variety of tools and machines engineered by Leonardo for the aid of the chef.
- Provide a description of table manners theorized by Leonardo for the aristocratic etiquette.
- Be familiar with the main artworks, sites, and monuments connected with the talent of Leonardo.
- Understand Leonardo's special connection with Nature and its pivotal role for his career as an artist and a scientist.
- Rediscover the forgotten contribution of Leonardo's investigations for the starting of the scientific revolution.

### 3. REQUIREMENTS

There are no prerequisites for this course.

### 4. METHOD

This course consists of lectures, class discussions, projects, and site visits within the local community. Mediums for instruction used will include, but are not limited to, interactive and hands-on activities which challenge thought processes, academic texts and studies, videos, slides, guided problem solving, and experiential and/or field learning activities where applicable.

### 5. TEXTBOOK – FURTHER READINGS – RESOURCES

#### TEXTBOOK:

- Antonio Forcellino, *Leonardo: A Restless Genius*, Polity Press, 2018
- Shelagh and Jonathan Routh, *Leonardo's Kitchen Notebooks: Leonardo da Vinci's notes on cookery and table etiquette*, Collins, 1987

The textbook is mandatory for successful completion of the course.

Where applicable, additional materials, handouts and/or notes will be provided by the instructor.

#### FURTHER READINGS

(Books listed below are available in the FUA-AUF library)

C. Pedretti - *Nature studies from the Royal Library* - Giunti, 1980

F. Capra - *Learning from Leonardo: Decoding the Notebooks of a Genius* - Berrett-Koehle, 2013

Emboden W. - *Leonardo da Vinci on Plants and Gardens* - Dioscorides Press - Portland 1987

Alfred W. Bennet - *Leonardo da Vinci as a Botanist* - Nature, May 1870

#### LIBRARIES IN FLORENCE

The FUA-AUF library is located in Corso Tintori 21. Please consult the posted schedules for official opening times. Also note that the library is for consultation only and it is not possible to borrow materials. The library is equipped with a scanner and internet access so that you may save or email a digital copy of the pages needed.

Students may also utilize additional libraries and research centers within the local community:

### **BIBLIOTECA PALAGIO DI PARTE GUELFA**

Located in Piazzetta di Parte Guelfa between Piazza della Repubblica and Ponte Vecchio. Please consult the library website for hours of operation:  
[http://www.biblioteche.comune.fi.it/biblioteca\\_palagio\\_di\\_parte\\_guelfa/](http://www.biblioteche.comune.fi.it/biblioteca_palagio_di_parte_guelfa/)

### **BIBLIOTECA DELLE OBLATE**

Located in via dell'Oriuolo 26. Please consult the library website for hours of operation:  
[www.bibliotecadelleoblate.it](http://www.bibliotecadelleoblate.it)

### **THE HAROLD ACTON LIBRARY AT THE BRITISH INSTITUTE OF FLORENCE**

Located in Lungarno Guicciardini 9. Please consult the library website for hours of operation. This library requires a fee-based student membership. For information:  
[www.britishinstitute.it/en](http://www.britishinstitute.it/en)

## **6. FIELD LEARNING**

Please consult your Official Registration for any mandatory field learning dates. Field Learning Activities cited in Official Registrations are an integral part of the course and also include an assignment that counts towards your final grade, details will be provided on the first day of class.

## **7. COURSE MATERIALS**

Food Labs: students are expected to wear the apron provided by the institution. Experiential Learning at the Pomario CEMI at the Cafaggio del Vescovo Garden: students are expected to use gardening tools and materials according to the indications of the provided Manual.

Should students wish to store materials or equipment, lockers are available with a deposit (given back after returning the key).

## **8. COURSE FEES**

Course fees cover course-related field learning activities, visits, and support the instructor's teaching methodologies. Book costs are not included in the course fee. The exact amount will be communicated by the instructor on the first day of class.

## **9. EVALUATION – GRADING SYSTEM**

10% Attendance

20% Participation and Assignments

20% Practical Evaluation for food lab courses

25% Final Paper

25% Final Exam

A = 93-100 %, A- = 90-92%, B+= 87-89%, B = 83-86%, B-=80-82%, C+ = 77-79%, C=73-76%, C-=70-72%, D = 60-69%, F= 0-59%, W = Official Withdrawal, W/F = Failure to withdraw by the designated date.

## **10. ATTENDANCE – PARTICIPATION**

Academic integrity and mutual respect between instructor and student are central to the FUA-AUF academic policy and reflected in the attendance regulations. Student presence is mandatory and counts toward the final grade.

On the second absence the attendance and participation grade will be impacted.

Please note that missing certain field learning activities may count for more than one absence.

On the third absence the instructor may lower the final grade by one letter grade. (Example: Final grade average of 93% or A will become a B).

**The fourth absence constitutes automatic failure of the course. Students with excessive absences will be asked to withdraw with a W (if before the deadline) or**

**leave the course with a WF.**

### LATE ARRIVAL AND EARLY DEPARTURE

Arriving late or departing early from class is not acceptable. Two late arrivals or early departures or a combination will result in an unexcused absence. Travel is not an exceptional circumstance.

### TRAVEL (OR DELAYS DUE TO TRAVEL) IS NEVER AN EXCUSE FOR ABSENCE FROM CLASS.

It is always the student's responsibility to know how many absences he or she has in a course. If in doubt, speak with your instructor!

**Participation:** Satisfactory participation will be the result of contributing to class discussions by putting forth insightful and constructive questions, comments and observations. Overall effort, cooperation during group work, proper care of work space and tools, responsible behavior, and completion of assignments will be assessed. All of the above criteria also apply to Field Learning and site visits.

## 11. EXAMS – PAPERS – PROJECT

The **Final Paper/Project** accounts for 25% of the course grade.

Format: topic, length, guidelines, and due date will be provided in the course addendum.

Material for research will be available in the FUA-AUF Library in Corso Tintori 21.

The **Final Exam** accounts for 25% of the final course grade. For exam time and date consult the course addendum. **The time and date of the exam cannot be changed for any reason.**

Format: the exam is divided into three sections:

Part I: 10 Multiple choice questions. Each correct answer is worth 2 points, for a total of 20 points.

Part II: 10 short-answer questions. Each correct and complete answer (concise explanations, main ideas, key words, names, etc.) is worth 5 points, for a total 50 points.

Part III: two essay questions; each correct and complete answer is worth 15 points (based on content, vocabulary, detail, etc.) for a total of 30 points.

The Final Exam is cumulative.

## 12. LESSONS

Lesson 1	
<b>Meet</b>	In class
<b>Lecture</b>	<p><b>Introduction and course overview</b> Introduction to the syllabus and material requirements. Information on assignments, paper/project, experiential learning tasks, and exams.</p> <p><b>The year was 1452...</b> Life and culture in the Tuscan countryside - Social hierarchy and food systems – Leonardo as a child: the early steps of the genius.</p>
<b>Objectives</b> (History and Philosophy, Food and Culture component)	<p>Describe Italian society at the dawn of Renaissance.</p> <p>Familiarize with the impact of religion on people's life and habits.</p> <p>Understand the concept of "sin" related to food consumption.</p> <p>Understand the social and cultural context where Leonardo was born.</p> <p>Understand the gastronomic education of Leonardo and the beginning of his duality.</p>
<b>Lab</b>	Torta rinascimentale con crema al limone e mandorle (Renaissance tart with lemon custard and almonds)
<b>Readings/ Assignments</b>	<p><i>Leonardo's Kitchen Note Books</i> pp. 13-16</p> <p><i>Learning from Leonardo: Decoding the Notebooks of a Genius</i> pp. 1-17</p>

Lesson 2	
<b>Meet</b>	In class
<b>Lecture</b>	<p><b>Art and botany in Early Renaissance Florence</b> Introduction to Early Renaissance Arts and History - Leonardo early life, education and family - The controversial relationship with his father.</p>
<b>Objectives</b> (Alchemy, Art and Botany component)	<p>Discover the art and history of Florence, around the decade 1450-1460.</p> <p>Understand the role of the Medici family for the city and the Florentine community.</p> <p>Gain exposure to the main monuments of the Early Renaissance.</p> <p>Learn the controversial relationship between the Medici and Leonardo.</p> <p>Frame the importance of alchemical studies in Renaissance.</p> <p>Familiarize with the basic tools, spaces, and techniques of botany.</p> <p>Familiarize with Cafaggio del Vescovo and the Pomario Garden CEMI</p>
<b>Visit</b>	<p>San Marco neighborhood (Casino, Apothecary, and Garden)</p> <p>Pomario Garden and organization of the Experiential Learning activities</p>
<b>Readings/ Assignments</b>	<p><i>Leonardo: A Restless Genius</i> pp. 3 - 18</p> <p>See additional material on the course website</p>

<b>Lesson 3</b>	
<b>Meet</b>	In class
<b>Lecture</b>	<b>Leonardo the Botanist</b> An overview of Leonardo's artworks and sciences in relation to natural elements - Case study: botanical sketches from Da Vinci's codex.
<b>Objectives</b> (History and Philosophy, Art and Botany component)	Learn about Leonardo's special connection with Nature, from childhood to adulthood. Understand how Leonardo's relationship and studies on Nature affected his genius and art. Discover the botanical experiences and studies made by the artist. Familiarize with the early artworks of Leonardo.
<b>Readings/ Assignments</b>	<i>Learning from Leonardo: Decoding the Notebooks of a Genius</i> , pp. 97- 128 <a href="https://www.nature.com/articles/002042a0">https://www.nature.com/articles/002042a0</a>

<b>Lesson 4</b>	
<b>Meet</b>	In class
<b>Lecture</b>	<b>The lore and tone of Tuscan rural society as an inspiration</b> The small village of Vinci and the rural society in XV century Tuscany - Culture and philosophy of peasant cuisine and its modernity - Local market and the relationship between the countryside and cities.
<b>Objectives</b> (Food and Culture component)	Understand the rural heritage of aristocratic cuisine. Gain confidence with Leonardo's gastronomic background. Understand the meaning of <i>cucina povera</i> (peasant cuisine) and its modernity. Learn the traditions that influenced the artist's future creativity. Explore the concept of cuisine as an expression of territory, local folklore, and respect of nature.
<b>Objectives</b> (laboratory component)	Familiarize with the practices of <i>cucina povera</i> and the no-waste philosophy. Understand the primacy of vegetables in Italian popular cuisine. Familiarize with the impact of <i>cucina povera</i> on the formation of taste of the artist. Know what/how peasants used to eat on a daily basis.
<b>Lab</b>	Wild herb and vegetable salad - Minestra di pane e verdure
<b>Readings/ Assignments</b>	See additional material on the course website

<b>Lesson 5</b>	
<b>Meet</b>	In class
<b>Lecture</b>	<b>Leonardo's Vitruvian Man</b> The historical and philosophical concept of the Renaissance Man - The birth of the Italian garden and its legacy.
<b>Objectives</b> (Art and Botany, Philosophy component)	Discover the concept of Nature and Mankind in Renaissance times. Familiarize with the style and tradition of Italian gardens. Recognize the different elements and plants of an Italian garden. Understand the main botanical techniques used during the Renaissance.
<b>Visit</b>	The SM Novella Workshop Gardens @ Villa Petraia
<b>Readings/ Assignments</b>	<i>Leonardo: A Restless Genius</i> pp. 141 - 154 <i>Learning from Leonardo: Decoding the Notebooks of a Genius</i> pp. 129 - 152

<b>Lesson 6</b>	
<b>Meet</b>	In class
<b>Lecture</b>	<b>Leonardo's apprenticeship in Florence</b> The training of the genius - Talent and extravagance in Leonardo's early artworks - Leonardo's provocative attitude - Anonymous accusations.
<b>Objectives</b> (History and Philosophy, and Art component)	Gain confidence with Leonardo's eccentric behavior. Learn the characteristics of an artistic workshop in Early Renaissance Florence. Familiarize with the life and work of the young apprentice Leonardo at Verrocchio's workshop. Understand the importance Verrocchio workshop for the Renaissance culture. Familiarize with the main artworks produced by Leonardo at the time of his apprenticeship in Florence.
<b>Readings/ Assignments</b>	<i>Leonardo: A Restless Genius</i> pp. 18 - 36 and pp. 65 - 79 See additional material on the course website

<b>Lesson 7</b>	
<b>Meet</b>	In class
<b>Lecture</b>	<b>The alchemy and symbolism of herbs and spices</b> The social discrimination of ingredients - "Tell me what you eat and I'll tell you who you are": food and social identity
<b>Objectives (Food and Culture component)</b>	Learn the main flavor trends of Renaissance cuisine. Describe the role of herbs, spices, sugar, and nuts in Renaissance gastronomy. Examine the obsession for sugar in Renaissance Italy. Reflect on food as a factor of social distinction. Learn common applications of herbs in medicine and kitchens. Define the symbolism behind the use of spices and nuts. Learn traditional Renaissance recipes still present in Tuscan gastronomy.
<b>Lab</b>	Salviata - Biancomangiare with candied fruits
<b>Readings/ Assignments</b>	<i>Leonardo's Kitchen Notebooks</i> pp. 147-151 <a href="https://www.pilloledistoria.it/12401/storia-moderna/lo-zucchero-cucina-rinascimentale?lang=en">https://www.pilloledistoria.it/12401/storia-moderna/lo-zucchero-cucina-rinascimentale?lang=en</a>

<b>Lesson 8</b>	
	<b>BREAK</b>

<b>Lesson 9</b>	
<b>Meet</b>	In class
<b>Lecture</b>	<b>At Leonardo's Lab</b> Leonardo's Florentine experiments in science, art and engineering - "Art is never finished, only abandoned": a restless genius
<b>Objectives (History and Philosophy, Alchemy Art and Botany component)</b>	Understand the different functions and the importance of a workshop ("la bottega dell'artista"). Learn how Leonardo became a professional artist in Renaissance Florence. Familiarize with the different research and studies undertaken by Leonardo in Florence. Explore and experience the Florentine places of Leonardo's experiments. Familiarize with the concept of a Renaissance Man. Learn how herbs and plants were used for medical use.
<b>Visit</b>	Balconorto Garden
<b>Readings/ Assignments</b>	<i>Leonardo: A Restless Genius</i> pp. 36 - 65 See additional material on the course website



<b>Lesson 10</b>	
<b>Meet</b>	In class
<b>Lecture</b>	<b>Leonardo's aesthetics: food as <i>art for the senses</i></b> Leonardo's innovative presentation style as a new form of art - The dawn of Leonardo's nonconformism: The Three Frogs Tavern - Vegetarianism and meat consumption in the 1400s.
<b>Objectives</b>	Identify the features of Leonardo's nouvelle cuisine. Trace the first steps of Leonardo as a culinary artist. Familiarize with Leonardo's vegetarian choice. Analyze Leonardo's observations of vegetables. Understand the role of meats and vegetables within the Renaissance meal. Examine Leonardo's plating skills and his mania for geometry.
<b>Lab</b>	Basil crostini - Porridge tiles with sauces
<b>Readings/ Assignments</b>	<i>Leonardo's Kitchen Notebooks</i> pp. 17-23/25-27/136-139 / 169-173

<b>Lesson 11</b>	
<b>Meet</b>	In class
<b>Lecture</b>	<b>Leonardo: inspired by Nature</b> Case studies: <i>The Annunciation</i> (1475 c.), Ginevra dei Benci portrait (1480 c.) and other works - Examples from Leonardo's sketches and quotes - The invention of the "sfumato" technique.
<b>Objectives</b> (History and Philosophy, Art and Botany component)	Gain practice through Leonardo's inspirational walks inside and outside Florence. Understand how the genius of Leonardo was constantly inspired by natural elements. Analyze the Art-Nature relationship for artists in Renaissance times. Directly experience and explore the same natural landscape that inspired the art, science, and technology created by the genius.
<b>Visit</b>	Vivaio Il Calicanto
<b>Readings/ Assignments</b>	<i>Leonardo: A Restless Genius</i> pp. 79 - 101 See additional material on the course website

<b>Lesson 12</b>	
<b>Meet</b>	In class
<b>Lecture</b>	<p><b>Leonardo, a Florentine Expat: from Milan to France</b>  Leonardo's new passions and discoveries in natural sciences and architecture.  First Case Study: Sala dell'Asse in the Sforza Castle  Second Case Study: <i>The Virgin of the Rocks</i> (1486 c.)  Third Case Study: <i>The Monna Lisa</i> (1503 c.)</p>
<b>Objectives</b> (History and Philosophy, and Art component)	<p>Interact with the main artistic and scientific projects produced by Leonardo in Mila.  Learn the life and role of a "court artist" in Renaissance times.  Understand Leonardo's final years in France, his projects, and his legacy.</p>
<b>Readings/ Assignments</b>	<p><i>Leonardo's Kitchen Notebooks</i> pp. 47-60  <i>Leonardo: A Restless Genius</i> pp. 105 - 129 and 293 - 302</p>

<b>Lesson 13</b>	
<b>Meet</b>	In class
<b>Lecture</b>	<p><b>Leonardo's Last Supper and The Codex Romanoff</b>  The genesis and features of Leonardo's <i>Last Supper</i> - The complex creative process of Leonardo - Presenting the Codex Romanoff and its controversies - Leonardo <i>Master of Ceremonies</i> - Court opulence VS the quality of simplicity - Leonardo's machines and inventions.</p>
<b>Objectives</b> (Food and Culture component)	<p>Understand the importance of banqueting as a social moment.  Learn Renaissance table manners and Leonardo's proposals for their improvement.  Identify the <i>cook - master of ceremonies</i> duo in Renaissance times.  Examine Leonardo pioneering kitchen devices.</p>
<b>Objectives</b> (Laboratory component)	<p>Part 1  Understand Leonardo's vision of a new style of cuisine and service.  Explore the unconventional culinary creations of the artist.</p> <p>Part 2  Identify the dishes of Leonardo's <i>Last Supper</i>.  Understand how Leonardo adapted the menu to his era.</p>
<b>Lab</b>	<p>The last supper menu - Part 1&amp;2  Part 1 Porridge with pork and cheese - Boiled (poached) eggs (test kitchen)  Part 2 The <i>Last supper</i> menu</p>
<b>Readings/ Assignments</b>	<p><i>Leonardo's Kitchen Notebooks</i> pp. 24&amp; 29-47/64-65/68/71-72/77-78/110-111/115-120/128-129</p>

<b>Lesson 14</b>	
<b>Meet</b>	In class
<b>Lecture</b>	<b>Plants and their Renaissance Symbolism</b> The tradition of the Last Suppers in Florence - Plants as inspirations for artists and their practical and symbolic use in Renaissance art.
<b>Objectives</b> (History and Philosophy, Art and Botany component)	Familiarize with the functions, different styles, and symbols of a <i>Cenacolo (Last Supper)</i> . Experience different examples of <i>Last Supper</i> depictions in Florence. Understand the role of botanical studies for the arts and sciences in Renaissance. Recognize the main symbols associated with plants. Learn how herbs and plants were used and transformed for artistic purposes.
<b>Visit</b>	A <i>Last Supper</i> location in Florence, chosen from Sant'Apollonia (Andrea del Castagno), Ognissanti (Ghirlandaio), or San Salvi (Andrea del Sarto). Pre-visit location details will be provided on the course site.
<b>Readings/ Assignments</b>	<i>Leonardo: A Restless Genius</i> pp. 169 - 192 See additional material on the course website

<b>Lesson 15</b>	
<b>Meet</b>	In class
<b>Lecture</b>	<b>FINAL EXAM</b>