

IDH3931 — Interdisciplinary Junior Honors ‘The Secrets of Alchemy’ – Fall 2020
class #26531, section #0015, and class #26534, section #0016

Instructor	Dr. Alexander Angerhofer (Dr. A.)
Phone	392-9489 (office, CLB 318A), or 392-4582 (office, LEI 214A). If I am in my home office these numbers will eventually forward to my cell phone.
E-mail	alex@chem.ufl.edu
Class Times	W 7 th period (1:55pm-2:45pm) on zoom: https://ufl.zoom.us/j/3164895856 .
Labs	Biweekly T11–E1 (section #0015) and W11–E1 (section #0016) periods (6:15pm – 8:10pm) in JHH 110, starting 9/8 and 9/9.
Office Hours	T 8 th period (3:00 – 3:50pm) on zoom: https://ufl.zoom.us/j/3164895856 and by appointment.
TAs	Ally Cagle (a.cagle@ufl.edu) and Catherine Fabiano (cfabiano@ufl.edu)

Holidays	09/07 (Labor Day), 11/11 (Veterans Day), 11/25 – 27 (Thanksgiving holidays), 12/10 – 11 (reading days).
Class Text	“The Secrets of Alchemy,” by Lawrence M. Principe, The University of Chicago Press, Chicago/IL, 2013, ISBN #978-0-226-10379-2.
Points Earnable	10× discussion paragraphs @ 2 pts. each for 20 pts. total. 5× active discussion participation @ 4 pts. each for 20 pts. total. 1× discussion leader @ 20 pts. each for 20 pts. total. 1× 15 min. presentation @ 40 pts. each for 40 pts. total. 6× lab participation @ 10 pts each for 60 pts total. 4× lab reports @ 10 pts each for 40 pts total. Extra points available: 4× discussion paragraphs, 1× active discussion participation, and 2× lab report for a total of 32 extra points. Maximum earnable points: 232 out of 200.
Grading Scheme	Out of 200 points: A ≥ 94% (188 pts.) 94% (188 pts.) > A– ≥ 90% (180 pts.) 91% (180 pts.) > B+ ≥ 86% (172 pts.) 88% (172 pts.) > B ≥ 82% (164 pts.) 82% (164 pts.) > B– ≥ 78% (156 pts.) 79% (156 pts.) > C+ ≥ 74% (148 pts.) 76% (148 pts.) > C ≥ 70% (140 pts.) 70% (140 pts.) > C– ≥ 66% (132 pts.) 67% (132 pts.) > D+ ≥ 62% (124 pts.) 64% (124 pts.) > D ≥ 58% (116 pts.) 58% (116 pts.) > E.

Course Schedule (tentative):

Date	Reading	Topic	Assignments
09/02/20		Discussion of Syllabus	
09/09/20	pp. 1 – 26	Introduction: What is Alchemy? 1. Origins: Greco-Egyptian Chemeia	Discussion paragraphs, student-led discussion
09/16/20	pp. 27 – 50	2. Development: Arabic al-Kīmiyā	Discussion paragraphs, student-led discussion
09/23/20	pp. 51 – 82	3. Maturity: Medieval Latin Alchemia	Discussion paragraphs, student-led discussion
09/30/20	pp. 83 – 106	4. Redefinitions, Revivals, and Reinterpretations: Alchemy from the Eighteenth Century to the Present	Discussion paragraphs, student-led discussion
10/07/20	pp. 107 – 136	5. The Golden Age: Practicing Chymistry in the Early Modern Period	Discussion paragraphs, student-led discussion
10/14/20	pp. 137 – 171	6. Unveiling the Secrets	Discussion paragraphs, student-led discussion
10/21/20	pp. 173 – 210	7. The Wider Worlds of Chymistry Epilogue	Discussion paragraphs, student-led discussion
10/28/20		Topics of Student Interest Related to the Book	Student Presentations
11/04/20		Topics of Student Interest Related to the Book	Student Presentations
11/18/20		Topics of Student Interest Related to the Book	Student Presentations
12/02/20		Topics of Student Interest Related to the Book	Student Presentations
12/09/20		Topics of Student Interest Related to the Book	Student Presentations

Further Important Information:

1. **Overview:** IDH3931, *The Secrets of Alchemy*, has grown out of a discussion-oriented (un)common reads class. It has been adapted to an interdisciplinary junior honors class by the addition of a hands-on laboratory component. The class is still centered around the book by Lawrence Principe, *'The Secrets of Alchemy.'* The course provides 2 academic points toward Honors Completion if completed with a grade of B or higher. Grading is based on active participation in class and in labs as well as one 15 minute presentation and 4 short lab reports. All students are expected to participate vigorously and earn an 'A' in the course.
2. **Goals:** Dr. Lawrence Principe is an internationally renowned scholar on the history of alchemy and a well respected organic chemist. His goals in writing this book are to try and answer such questions as: What is alchemy? Who were the alchemists, and what did they believe and do? What were their goals, and what did they accomplish? How did they envision their world and their work, and how were they seen by contemporaries? In reading this book we will follow his search for answers as well as raise our own questions. We will look at alchemy from a variety of interdisciplinary vantage points, the most obvious ones being history and modern chemistry. However, our discussion will also include other fields of study such as art history, religion, literature, cultural world views, *etc.* In the end we hope to come to a better understanding and appreciation of the history and the practice of alchemy as well as the cultural settings in which it was practiced. The hands-on lab experience will make alchemy more practical to students.

- Logistics:** During the first approximately half of the semester we will read the book, one chapter each week. During this period the (online) classroom meeting will be dedicated to active discussion of the text. Students will have read the assigned chapters (see above list) ahead of time and prepare two distinct paragraphs describing topics they found to be of interest that they wish to consider in the class discussion. These paragraphs will be submitted on canvas and are due the day before class meets at 12:00pm (noon) to allow the discussion leaders to review and help them prepare to lead the discussion the next day. Students will take turns serving as discussion leaders (up to two discussion leaders per class discussion). The second half of the semester will be devoted to student presentations on ‘mini research projects’ of the students’ own choosing. Out of the many topics of interest that were discussed in the first half of the semester students will pick what interests them most and explore it further, supported by their own research. These mini research projects will likely involve further reading in the secondary literature and/or other sources of information. Students will make a 15 minute presentation to the class community during the second half of the semester (~15 minutes talk and 1 – 2 minutes discussion). Please make use of your instructor’s office hours to help fine-tune your presentation. The grade students receive for their presentation (40 points) will come from both peer and instructor evaluations. Sign-up sheets for students to volunteer for the discussion leader role and for classroom presentations will be available.
- Laboratory Activities:** Over the course of the semester we will have the opportunity to perform six lab experiments related to alchemy. Ancient recipes will be recreated during some of these experiments in a modern lab setting. These activities are designed to experience the practical side of alchemy. The two sections of the class will meet either Tuesday or Wednesday evenings during periods 11 and E1 (6:15pm – 8:10pm) in the General Chemistry Laboratory area in JHH110. Please note that you earn points by actively participating in each lab. You also earn points by writing a short report on your lab activities, about one page in length and typed. Lab reports are due one week after the activity takes place. Four lab reports are mandatory for full points. Additional lab reports may serve to acquire extra bonus points.

Lab #	Description	Dates
1	Making Silver and Gold from Copper	09/08 & 09/09
2	Making Gold – The Sulfur Water	09/22 & 09/23
3	Distilling Essential Oil from Red Cedar Wood	10/06 & 10/07
4	Making Dyes – Prussian Blue and Mauve	10/20 & 10/21
5	Making Dyes – Cochineal Red and Indian Yellow	11/03 & 11/04
6	Using our Dyes – Tie-Dyeing your own T-Shirt	11/17 & 11/18

- Textbook:** The listed book serves as the basis for the reading and is required. It is available in hardcover, paperback, and as an ebook. Any of these editions are fine.
- Elearning:** This course uses the canvas elearning site. Please log on at <https://elearning.ufl.edu/> to get access to your course page. Assignments should be submitted on canvas.
- Assignments – Reading:** Please refer to the reading assignments in the course schedule above. Reading of the book is essential for your participation. You will have to finish reading the assigned chapter(s) on Tuesday prior to our Wednesday class meeting at which the material will be discussed. We will have finished reading and discussing the book itself by October 21.
- Assignments – Discussion Paragraphs:** After reading the assigned chapter each week you are expected to write a paragraph **each** on **two** topics of interest which you would like to see addressed in the discussion that week. Each of your paragraphs is worth 2 points. These

paragraphs may contain cited statements from the book that you found intriguing, questions that have arisen in your mind after the reading, concepts discussed in the chapter, *etc.* Anything that is related to the reading assignments for that week is fair game. There are seven student-led discussions for which discussion paragraphs will be formulated. The deadline for their submission is on the day before the discussion at noon. This will allow discussion leaders to look at the paragraphs and organize their talking points for the following day.

9. **Assignments – Discussion Participation:** Active participation in the student-led discussions is essential for this book to come to life. Be prepared to expand verbally on your discussion paragraphs, be ready to ask questions, answer questions, and in other ways constructively contribute to the discussion. The instructor will keep track of your participation for grading.
10. **Assignments – Leading the Discussion:** For one of the seven discussions you will be a discussion leader together with possibly one other student. When two students lead the discussion they should work as a team and come prepared to lead the discussion. Typically, you should start with a very brief review of the chapter that had been assigned for the week, followed by discussion points you picked from the various topics that were indicated in the discussion paragraphs of your classmates as well as your own. In leading the discussion feel free to utilize powerpoint, demonstration objects, youtube videos, *etc.* Most importantly, make sure to draw your fellow students into a lively discussion. Your instructor will keep track of your discussion leadership for grading.
11. **Assignments – Student Presentations:** In the second half of the semester (starting on October 28th) each student will deliver a 15 minute presentation to the class. Students should select a topic of interest to them that is related to the book or the lab experiments. It is expected that the presentations are more in depth than just a review of parts of the book or what went on in lab. You should use the rather large bibliography in the book to do your own research on your topic of interest and educate the class on what you found out. Examples of such topics are: further background research on the history of alchemy during a certain period, focus on the history and/or personality of certain practitioners of alchemy, the study of alchemical theories of matter and how they differ or are similar to modern ones, connections between gnosticism and alchemy, the chemical basis of famous alchemical recipes, representation of alchemy in art, *etc.*, if it is connected to the topic of our book it is fair game. Students may start working on their research as soon as they decide on their topic of interest. There is no ‘chapter’ or chronological order necessary for these presentations. Students should feel free to utilize the expertise and resources of the instructor. To make sure that your presentation will be successful it is a good idea to share it with your instructor approximately a week in advance so that he can give you guidance on content and delivery.
12. **Class Attendance:** Regular class attendance is essential for your success in this class. However, we will not do roll-calls. Repeated absence in class and discussion session will make it very difficult to earn full participation points. For further information on UF's attendance policies which are in effect for this course, see: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx> .
13. **Office Hours:** I have set apart office hours on Tuesdays, after discussion paragraphs are due, *i.e.*, T8 period from 3:00pm till 3:50pm. Discussion leaders should take advantage of these office hours if they wish to get my feedback on their planned discussion for the following day. However, I am also available by appointment (please request by email at least one day in advance), particularly if your schedule prevents you from coming to my office hours.
14. **Email Policy:** For all course-related business, use your official @ufl.edu gatorlink email address or the e-learning messaging system. I will generally not respond to emails from other sources (*e.g.*, your gmail or yahoo address).

15. **Cell Phone Etiquette:** Please put all cell phones or other electronic devices on ‘**silent mode**’ during all class/discussion periods. Please do not leave the classroom during meeting times to make a phone call. Thank you!
16. **Zoom Etiquette:**
 - Be on time. The meeting may be locked by the instructor after class has started.
 - After joining the meeting turn on the Participants box and the Chat box (at the bottom of your zoom window). The Participants box allows you to see who is present in the zoom room and allows you to change your screen name. It also allows you to ‘raise hand’ if you wish to participate. The Chat box allows you to communicate with other participants as a group or individually. You can type questions or provide answers in the chat box. The TAs will monitor both the participants list for raised hands and the chat box for questions.
 - Use your real name as your screen name. If necessary, rename yourself, by going to Participants → hover mouse over your name (always at the top) → More → Rename.
 - Mute your microphone if you aren’t talking to avoid acoustic feedback or background noise. Turn your microphone on after having been given the permission to do so to ask questions or provide input to the class topic. When first joining your microphone will always be muted.
 - Keep your video on. This is a small enough class where everybody should be able to get to know everybody else by first name eventually and participation is easier if we can see you talking paying attention.
 - While participating in class stay focused on the topic of the lesson. This applies to both spoken audible participation, shared screens, and chat messages. Screen sharing will generally be turned off except for the presenters or discussion leaders.
17. **Online Course Evaluation:** Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.
18. **Students with Disabilities:** Students requiring special accommodations should register with the Dean of Students Office (<https://dso.ufl.edu/>, 352-392-1261) and the Disability Resource Center (DRC, <https://disability.ufl.edu/>, 352-392-8565), and present documentation from that office to the instructor.
19. **Counseling Services:** The University of Florida provides counseling services for students, staff, and faculty. See <http://www.counseling.ufl.edu/cwc/>. If you or a friend are in distress, call (352) 392-1575 (available 24/7), or email umatter@ufl.edu. Alternatively, call the Alachua County Crisis Center, (352) 264-6789. For sexual assault recovery services call the Student Health Care Center at (352) 392-1161. For life-threatening emergencies always call 911.
20. **Emergency Numbers and Web Sites:**

UFPD (UF Police Department): In case of emergency dial 911. The UF campus police non-emergency number is (352) 392-1111. Their web site: <http://www.police.ufl.edu/>,
UF Emergency management: (352) 273-2100. <https://emergency.ufl.edu/>,
Infirmary (student health center): (352) 392-1161, <http://shcc.ufl.edu/>.
EH&S (Environmental Health & Safety): (352) 392-1591, <http://www.ehs.ufl.edu/>.
21. **Other Academic Resources:** UF provides several other resources for students, such as Library Support here: <http://cms.uflib.ufl.edu/ask>, where you can find various ways to receive assistance with respect to using the libraries or finding resources.

The Career Resource Center is located on level One in the Reitz Union, (352) 392-1601, and provides career assistance and counseling. Refer to <https://career.ufl.edu/> for further info.

The Teaching Center is located in Broward Hall, call (352) 392-2010 or (352) 392-6420 and provides students with tutoring services and counseling regarding general study skills. Refer to <http://teachingcenter.ufl.edu/> for further info. It may also provide employment opportunities as tutors for well qualified students.

The Writing Studio is located at 302, Tigert Hall, (352) 846-1138, and provides help with brainstorming, formatting, and writing papers, see: <https://writing.ufl.edu/writing-studio/>.

The Ombuds Office is located at 31 Tigert Hall, (352) 392-1308, and provides students assistance in resolving problems and conflicts that arise in the course of interacting with the University of Florida. By considering problems in an unbiased way, the Ombuds works to achieve a fair resolution and works to protect the rights of all parties involved. For further information go to <https://ombuds.ufl.edu/> or refer to the official complaints policy here: https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf.

22. **Honor Code:** This class will operate under the policies of the student honor code which can be found at: <https://sccr.dso.ufl.edu/process/student-conduct-code/>. The students, instructor, and TAs are honor-bound to comply with the Honor Pledge: **We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.**

If you have further questions, please contact me. Have a great semester!

Sincerely Yours, Alexander Angerhofer (Dr. A)