



# SUFFOLK UNIVERSITY

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## MADRID CAMPUS

### CI 141 M1 - CREATIVE APPROACH TO LEARNING

#### **Instructor Information:**

**Instructor:** Carl-Gustaf Pierre Saluste, Ph.D.

**Email:** [gsaluste@suffolk.es](mailto:gsaluste@suffolk.es)

**Homepage:** [www.suffolk.edu/madrid-campus/academics/faculty](http://www.suffolk.edu/madrid-campus/academics/faculty)

#### **Course Information:**

**Catalog Description:** In this course students will be introduced to the practice of creativity as a rigorous approach to problem solving requiring research, persistence and grit. Students will work collaboratively to effectively synthesize existing ideas, images and skill sets in original ways. They will embrace risk, and support divergent thinking. In the process, they will be more confident life-long learners.

**Instructor's Additional Description:** This course is directed to all students, regardless of their field of interest. In order to approach creative thinking, science-based activities will serve as tool for the first part of the course. The students will practice interview techniques, mind mapping, public speaking and data presentation. Later in the course, students will have the opportunity to apply creative thinking to their own field of interest.

**Prerequisites:** None

**Credit Hours:** 3 credits

This course follows the US Federal Government's Credit Hour definition: "An amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutional established equivalence that reasonably approximates no less than:

- (1) One hour of classroom or direct faculty instruction and a minimum of two hours of out of class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or
- (2) At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours."

For full up-to-date statement:

[https://cihe.neasc.org/sites/cihe.neasc.org/files/downloads/POLICIES/Pp111\\_Policy\\_On\\_Credits-And-Degrees.pdf](https://cihe.neasc.org/sites/cihe.neasc.org/files/downloads/POLICIES/Pp111_Policy_On_Credits-And-Degrees.pdf)

A more detailed breakdown of the student engagement is given below:

Assignment	Engagement Estimate	Engagement Hours
Course readings	200 pages x 9 min/page	25
Review of PPT-presentations	6 PPT x 50 min/PPT	6
Preparation of practical activities	30h preparation	30
Midterm exam	5h preparation	5
Final exam	15h preparation	15
Final paper	15h preparation	15
Class attendance	3h x 15 weeks	45
<b>ESTIMATED TOTAL</b>		<b>141 HOURS</b>

**Textbook/Course Materials:**

You will be given handouts throughout the course. Some material may be posted on Blackboard, or sent to you by email. You must have a notebook for this course, where you write down your thoughts and ideas. It should also be used for any written assignment you may have. Also, as library reference books, you will find:

- 1) Zig Zag: The Surprising Path to Greater Creativity by Keith Sawyer
- 2) The Creative Habit by Twyla Tharp
- 3) Creative Confidence: Unleashing the Creative Potential within Us All by Tom Kelley and David Kelley

We will also be reading excerpts from a variety of other Creativity texts throughout the semester and incorporating Creativity exercises into our weekly class sessions."

**Course Goals & Learning Objectives:**

Upon successful completion of this course, students will know/understand:	Upon successful completion of this course, students will be able to:	How the student will be assessed on these learning outcomes
That we all have the potential to be creative	<ul style="list-style-type: none"> <li>• Recognize one’s potential for thinking and acting creatively when approaching a complex, multidisciplinary task.</li> </ul>	<ul style="list-style-type: none"> <li>✓ The students will use mind mapping and brainstorming</li> <li>✓ to come up with a reasonable and feasible approach to the complex problem that touch several areas, looking into "The Resistance in Neisseria gonorrhoeae". The scenario that is happening on campus.</li> </ul>
Problems can be solved in creative ways	<ul style="list-style-type: none"> <li>• Recognize characteristics of an environment that supports creativity and innovation</li> <li>• Employ a range of creative tools and strategies to solve problems</li> <li>• Approach problem solving iteratively through reflection, testing, and critiquing until feasible solutions are found</li> <li>• Understand how the brain is linked to creativity.</li> </ul>	<ul style="list-style-type: none"> <li>✓ We will talk about and practice constructive criticism as a tool to make students share ideas in a respectful way.</li> <li>✓ The students will get specific tasks to solve in a creative way, e.g. throwing eggs from a height without breaking them.</li> <li>✓ Learning about the basics of the human brain, how the different parts are connected to each other, and how we synthesize new ideas from known facts. This will be tested with a quiz.</li> </ul>

Upon successful completion of this course, students will know/understand:	Upon successful completion of this course, students will be able to:	How the student will be assessed on these learning outcomes
Collaboration cultivates creativity	<ul style="list-style-type: none"> <li>• Identify skills needed for effective teamwork</li> <li>• Identify the characteristics of effective interpersonal communication</li> <li>• Demonstrate effective interpersonal communication skills</li> </ul>	<ul style="list-style-type: none"> <li>✓ In the Nisseria gonorrhoeae-project, the students will work in teams, each team having a specific task (e.g. informing fellow students about drug multiresistance).</li> <li>✓ The students will give regular presentations of their work, and also show how the different teams work together. The final result will be discussed in a session of in-class presentations.</li> </ul>
How risk-taking and resilience are important elements in the creative process	<ul style="list-style-type: none"> <li>• Increase tolerance for risk taking</li> <li>• Demonstrate</li> <li>• The ability to learn from failure</li> </ul>	<ul style="list-style-type: none"> <li>✓ Covered by simple laboratory experiments where the students get a task, come up with an idea on how to solve it, try it out....and start from scratch, if needed.</li> </ul>

### **Assignments/Exams/Papers/Projects:**

Students will be evaluated in the following areas:

- Participation
- Quiz on the human brain
- Paper on the history of an idea
- Practical work
- Homework and tasks

### **Grading/Evaluation:**

Attendance is mandatory and class participation will be encouraged. More than two unjustified absences will contribute negatively to the final grade, as specified under Course and Classroom Policies on this document.

The assigned tasks presented by the student will be taken into account as positive if they are handed in *on time*. Late assignments may be accepted under motivated circumstances. **DO TALK TO ME IF YOU HAVE PROBLEMS TURNING IN THE HOMEWORK ON TIME, AND I WILL LET YOU KNOW IF YOUR CIRCUMSTANCES MOTIVATE A LATE SUBMISSION.** If late submission is not motivated, the delayed homework assignments will not count towards your final grade.

The percentage of each part of the course to the final grade will be:

- Participation: 10%
- Quiz on the human brain: 10%
- Practical work (lab, projects): 40%
- Homework and tasks: 20%
- Research paper: 10%
- Final exam: 10%

If the students consistently arrive more than 10 minutes late, 5% will be taken away of the grade each time. More than eight late arrivals will make the student fail.

### **Participation/Attendance Policy:**

The SUMC Student Handbook states the following:

*Once a student is registered for a course, attendance at every meeting of every class is expected, including those held in the first week of the semester. A maximum of two unjustified absences is permitted. Each additional absence will cause the final course grade to be lowered by one-third of a letter grade, i.e., from A to A-; A- to B+; B+ to B, etc.*

*Excessive absences in a course will have a negative effect on the final grade. When a student is absent, the quality of his or her work in a course will deteriorate since material missed in class sessions can rarely be made up satisfactorily, even though the student remains responsible for that work.*

*Please note that even when a student has a justified reason for missing class, such as illness, the negative academic impact on learning will be the same as if the absence were for spurious reasons.*

In this course, any absence due to illness should be justified by a note from the student's physician or other health professional confirming the day(s) on which the student was unable to attend class. Students are responsible for all material and assignments for the days missed, regardless of the reason for the absence.

The fact that a student is present in class does not alone contribute to the participation score. Participation and improvement in class is what makes up 20% of the grade.

In the event that a class meeting is unexpectedly cancelled, students will be expected to continue with readings or other assignments as originally scheduled. Any assignments due or class activities (e.g., a quiz, exam or presentation) planned for such a cancelled class are due at the next class meeting unless other instructions are communicated.

### **Disability Statement**

If you anticipate issues related to the format or requirements of this course, please meet with me. I would like us to discuss ways to ensure your full participation in my classroom.

If formal, disability-related accommodations are necessary, it is very important that you be registered with the Office of Disability Services (ODS) at the main Campus in Boston so that I am notified of your eligibility for reasonable accommodations. We can then plan how best to coordinate your accommodations. Check the ODS web site at [www.suffolk.edu/disability](http://www.suffolk.edu/disability) for information on accommodations.

### **Student Resources:**

SUMC provides a range of student services, both academic and personal. To learn more about course-related tutorials and academic workshops, refer to the SUMC Student Handbook, Section 2 "Academic Policies and Services". Section 5, "Living in Madrid", contains information on the medical and mental health resources, including an English-speaking therapist, available to you.

### **Midterm Review:**

At midterm, on week 7, you will be given a midterm grade based on your progress to date and performance on assignments, quizzes and midterm exam. Midterm grades of C- or below will be reported to the Madrid Campus Academic Standing Committee, with an explanation of what I believe has contributed to that grade: excessive absences, poor time management or study skills, lack of effort, difficulty with the course material or with writing or language skills, etc. The Academic Standing Committee or I may contact you to suggest strategies for addressing these difficulties. I strongly encourage you to visit me during my office hours so we may discuss how you can be successful in this class.

### **Academic Misconduct:**

[www.suffolk.edu/about/mission-history/policies-procedures/academic-misconduct-policy](http://www.suffolk.edu/about/mission-history/policies-procedures/academic-misconduct-policy)

Suffolk University expects all students to be responsible individuals with high standards of conduct. Students are expected to practice ethical behavior in all learning environments and scenarios, including classrooms and laboratories, internships and practica, and study groups and academic teams. Cheating, plagiarism, unauthorized collaboration, use of unauthorized electronic devices, self-plagiarism, fabrication or falsification of data, and other types of academic misconduct are treated as serious offenses that initiate a formal process of inquiry, one that may lead to disciplinary sanctions.

Student work will be thoroughly examined for academic integrity and may be scanned using plagiarism detection software. A faculty member suspecting academic misconduct will contact the student using the Suffolk email address to schedule a meeting and will make all effort to do so within five business days of detecting the incident. During the meeting, the faculty member will present the documentation that led to suspected academic misconduct. Resolution of the incident will be according to the procedures outlined in the SUMC Student Handbook, 2016-2017.

### **Academic Grievances Policy:**

[www.suffolk.edu/student-life/student-services/student-handbook/university-policies-for-student-cas-sbs/grievances-academics](http://www.suffolk.edu/student-life/student-services/student-handbook/university-policies-for-student-cas-sbs/grievances-academics)

### **Course Schedule**

The schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better student learning.

<b>Week /Dates</b>	<b>General topic of lesson</b>	<b>Readings or other assignments due</b>
1	Introduction. The syllabus will be distributed and discussed. A ppt-presentation on creative thinking will also be given.	
2	Mind mapping: A powerful tool to bring order to your scattered ideas!  The scientific method: what does it mean, how can it be applied and how does it correlate to creativity?	A ppt-presentation on mind mapping and the scientific method will be given. Different mind mapping exercises will be handed out.
3	The scientific method will be tested in the lab with different fun group exercises, e.g. How to make an egg stay in the middle of a water-filled beaker, Burning banknotes without burning them....	The students will be given a series of tasks to investigate. They will need to formulate testable hypotheses, and test them! The outcome will be presented with a mind map.
4	The function of the brain.	Homework on the function of the brain to be handed out.
5	Continuation of the function of the brain.	Homework on the function of the brain to be submitted.
6	Review session prior to brain quiz. Quiz taken Feb 21	Quiz on the human brain.
7	Introduction to the project "The Resistance in Neisseria gonorrhoeae". Ppt-presentation that focuses on therapeutic use of antibiotics, and resistance towards this drug class. Data collection and presentation will also be covered.	Brain quiz returned and discussed. Preparation of questionnaire for survey among fellow students about their knowledge of venereal disease and use of antibiotics. Performance of survey among students on campus.

<b>Week /Dates</b>	<b>General topic of lesson</b>	<b>Readings or other assignments due</b>
8	<b>SPRING BREAK</b>	
9	Preparation of a strategy/strategies to address the problem based on the results of the survey. Division of the class into smaller groups that focus on different aspects of the problem.	Presentation of the outcome of the survey.
10	The groups will gather to come up with a strategy to tackle the problem. Establishment of topics based on the students' field of study. Students are encouraged to either identify a topic themselves, or ask professors more linked to their field, for advice.	In-class presentation of an outcast to the strategy to be adopted, followed by a discussion session to finalize the strategy. Presentation of the final strategy adopted to tackle the issue of "The Resistance in Neisseria gonorrhoeae"
11	One session for in-class work around the proposed projects. In-class project presentations	Each student/group will present their project, clearly stating the background and the novel, creative part to be adopted.
11	Continuation of project presentations. One session for group work on the paper.	Selection of topic for the paper on The history of an idea. This is individual work!
13	Paper presentations	Each student will present their paper, with a personal reference about how the given idea has affected him/her.
14	Egg Throwing!	Submission of lab-related exercises
15	Cont. Paper presentations.  Review session	
<b>16</b>	<b>FINAL EXAM</b>	<b>11:30-13:30</b>