

# Syllabus

## AST 1005, Introduction to Astrobiology

### Spring Semester, 2016, Northwest Florida State College

**Course Description:** This course constitutes an examination of the possibility, probability, and potential nature of life that might exist beyond the Earth. Contemporary discoveries about current and past conditions suitable for the origin of life on Mars and some of the moons orbiting other planets in our own solar system are considered from a scientific perspective, and are discussed in the context of what we understand about life on Earth. The issue of life in solar systems beyond ours is also covered. Problems regarding the possibility of intelligent extra-terrestrial beings visiting the Earth and intelligent life beyond the Earth but still within our own solar system are additionally treated. All this is done in a fashion which integrates the various branches of science required to understand life beyond the Earth: Astronomy, Biology, Chemistry, Geology, and Physics. There are no prerequisites for this course, and it contains no laboratory component. It may be taught in a team fashion by faculty members from various scientific disciplines.

**Meeting Times and Places:** 12:30 PM – 2:20 PM Monday (M) and Wednesday (W) in Rm. 110 of the Science Bldg. (Bldg. 350)

**Instructors:**

<i>Instructor</i>	<i>Subjects Covered in this Course</i>	<i>Office Hrs.</i>
J. Bryan, Ph. D.	Geology, Planetary Science, & Paleontology	TBA
S. Hayek, Ph. D.	Biochemistry & Biological Evolution	TBA
C. Sweeney, Ph. D.	Physics, Astronomy, & Rocket Science	TBA

**Textbook:** J. Bennett and S. Shostak, *Life in the Universe*, 3<sup>rd</sup> ed. (Addison-Wesley, Boston, 2012), ISBN-13: 978-0-321-68767-8

**Grading:** There will be four tests throughout the semester, including the final examination. Each will be weighted ¼ towards the final grade. The tests will be a combination of multiple choice, true/false, and short-answer questions.

**Schedule:**

Lecture No.	Class Date	Chapter(s) & Section(s) Covered
1	M 1/11/16	Introduction to course; 1.1-2
2	W 1/13/16	1.3-4
Martin Luther King Day	M 1/18/16	No Class
3	W 1/20/16	2.1-3
4	M 1/25/16	2.4-3.2
5	W 1/27/16	3.3-5
6	M 2/1/16	4.1-3
7	W 2/3/16	Test 1; Chapt. 1-3
8	M 2/8/16	4.3-4
9	W 2/10/16	4.5-6
10	M 2/15/16	5.1-2
11	W 2/17/16	5.3-4
12	M 2/22/16	5.5-6
13	W 2/24/16	6.1-3
14	M 2/19/16	6.3-4
15	W 3/2/16	6.5-6
16	M 3/7/16	7.1-2
17	W 3/9/16	7.3-4
18	M 3/14/16	8.1-3
19	W 3/16/16	Test 2; Chapt. 4-7
Spring Break	M 3/21/16	No Class
Spring Break	W 3/23/16	No Class
20	M 3/28/16	8.4-5
21	W 3/30/16	9.1-2
22	M 4/4/16	9.3-4
23	W 4/6/16	10.1-3
24	M 4/11/16	10.4-5
25	W 4/13/16	11.1-3
26	M 4/18/16	11.4-12.3
27	W 4/20/16	12.4-13.1
28	M 4/25/16	Test3; Chapt. 8-11
29	W 4/27/16	13.2-3
30	M 5/2/16	13.3-Epilogue
Final Examination	W 5/4/16 12:00 PM- 1:50 PM	Final Examination; Chapt. 12-Epilogue