

FIRST-YEAR SEMINAR COURSE PROPOSAL
UNIVERSITY OF MARY WASHINGTON

Use this form to submit **FSEM 100 topics** courses for review **or any other existing course** that you wish to have designated to meet the first-year seminar requirement.

COURSE NUMBER:			
COURSE TITLE:	LEARNING WITH LEGO		
SUBMITTED BY:	Andréa Livi Smith	DATE:	Oct 31 2014
<i>This course proposal has the department's approval. (Put a check in the box to the right.)</i>			X

COURSE DESCRIPTION. In the space below, provide a one- to two-sentence description of this class. The description will be entered in Banner and will also be used in other publications about the first-year seminar program (such as the “Eagle Essentials” booklet).

<p>This FSEM will delve into the uses and meaning of LEGO, from their creation to today. Particular attention will be paid to the tension between creativity and order emphasized in the bricks' uses in the arts & design, science & engineering, and education.</p>

RATIONALE. Include short statement addressing how this course meets the FSEM’s basic components and new student learning outcomes (see FSEM call above), and why this course should be approved to meet the FSEM General Education requirement.

<p>Because LEGO are familiar and beloved, they provide a non-intimidating subject to help first year students in their introduction to the liberal arts. Furthermore, LEGO are used in the sciences, technology, the arts, and every discipline in between. Therefore, allowing students to focus on LEGO relates these sometimes disparate topics into a coherent whole, encouraging students to understand the connection between disciplines and applications of theories across topics.</p> <p>This course satisfies all FSEM course goals as: Studying LEGO and their application means students will <i>critically</i> interact with <i>primary</i> and <i>secondary</i> sources, as well as visual, tactile, and written media. Assignments are designed to allow students to work independently and as a community, to <i>research</i>, <i>write</i>, and <i>edit</i>, produce <i>creative</i> projects, and contribute to their classmates and the university at large both in print and <i>orally</i>. Finally, the course is designed to foster continued and meaningful <i>discussion</i> throughout the semester, both formally (leading discussion) and informally.</p>

SYLLABUS. *Attach a course syllabus.*

SUBMIT this form and attached syllabus **electronically as one document** to Dave Stahlman (wdstahlm@umw.edu). All submissions **must** be in electronic form.



UNIVERSITY OF MARY WASHINGTON FIRST YEAR SEMINAR

LEARNING WITH LEGO

INSTRUCTOR

Dr. Andréa Livi Smith

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Office Hours: M 2-4, W 2-3 T&R 10-11

COURSE DESCRIPTION

LEGO are more than a beloved toy. From advertising to the classroom, engineering, art, and everything in between, the interlocking bricks are ubiquitous. This FSEM will delve into the uses and meaning of LEGO, from their creation to today. Particular attention will be paid to the tension between creativity and order emphasized in the bricks' uses. The importance of visual and tactile learning will also be a major topic of discussion, as will be the widening scope of the bricks. By approaching learning through this toy, students will be immersed in the ideals of the liberal arts: understanding different perspectives, using varied sources, synthesizing information, applying learning, and teaching their peers.

COURSE GOALS

This course satisfies the general education curriculum's **First Year Seminar** requirement. This course strives to fulfill the FSEM pedagogical goals of participatory and exploratory learning through group and individual investigation of LEGO. Readings expose students to academic, science-based, creative, and other perspectives on the wide-ranging use and applications of LEGO. As with other FSEM courses, this course is intended to sharpen students' skills in the following areas:

- Read critically and evaluate both primary sources and modern authorities;
- Synthesize material from multiple sources to develop their own views on the topic;
- Utilize a variety of research techniques to retrieve information efficiently, evaluate retrieved information, and synthesize information effectively to support their messages or arguments;
- Effectively demonstrate development and organization of written arguments;
- Demonstrate the ability to edit and revise in the writing process;
- Apply the basic theories and principles of oral communication;
- Communicate effectively in a variety of settings, including public speaking and group discussion.

INSTRUCTOR POLICIES

Honor Code: All graded work is bound by the provisions of the Honor Code and must be pledged, signed, and dated. You can find out more about the Honor Code [here](#).

Written Assignments: In an effort to safeguard the environment, all written homework assignments (except where noted) are to be submitted in PDF format. Instructions to PDF a document are available [here](#). Assignments are due ([via email](#) or submitted on the course site) by the beginning of class unless otherwise specified. Late submissions will be marked down ten points per day. Spelling, grammar, and punctuation errors will reduce the overall grade on assignments, so students are strongly encouraged to proofread carefully and not rely solely on computer spelling/grammar checkers! Students are also encouraged to take advantage of the [Writing Center](#)'s assistance prior to submitting assignments.

Preparation & Participation: Keeping up with readings and assignments, participating in class, and interacting with classmates/teammates in a respectful manner will enrich the learning experience for everyone. Participation will count toward a substantial portion of final grades. Since this is a seminar-based course, participation is particularly important to foster a positive learning outcome for the entire class.

Attendance & Behavior: Attendance is vital both for learning and for lively class discussion. Attendance for all in-class exercises and presentations is required; these cannot be made up at a later date. Students are expected to display civil and respectful behavior during class. Cell phones must be silenced in class sessions, and laptops may only be used if used in a non-disrupting manner (no instant messaging, games, or sound). Violators will be referred to the Office of Judicial Affairs.

A mid-semester report of unsatisfactory (U) will be reported if a student has a C- or below in the course at the time reports are submitted.

Office of Disability Resources: The [Office of Disability Resources](#) has been designated by the University as the primary office to guide, counsel, and assist students with disabilities. If you receive services through that office and require accommodations for this class, please make an appointment with me as soon as possible to discuss your approved accommodation needs and bring your accommodation letter with you to the appointment. I will hold any information you share with me in strictest confidence unless you give me permission to do otherwise. If you have not made contact with the Office of Disability Resources and have accommodation needs, (note taking assistance, extended time for tests, etc.), please contact them at (540) 654-1266.

GRADING SCALE

A	4.00	93-100%
A-	3.70	90-92%
B+	3.30	87-89%
B	3.00	83-86%
B-	2.70	80-82%
C+	2.30	77-79%
C	2.00	73-76%
C-	1.70	70-72%
D+	1.30	67-69%
D	1.00	60-66%
F	0.00	<60%

RESOURCES

This FSEM will use a variety of primary and secondary sources ranging from popular culture to academia, in a plethora of media (written, audio, video, visual, and tactile.) **LEGO sets will be provided for students while they are enrolled in the course.** Readings are listed below.

Abrams, R. (2014) Short-Lived Science Line From Lego for Girls. *The New York Times*. 8/21 (Business Day)

Basulto, D. (2014) Why LEGO is the most innovative toy company in the world. *The New York Times*. 2/13

Bedford, A. (2012) The Unofficial LEGO Builder's Guide

Dell'Antonia, K.J. (2012) 'Worst Toy Awards' Target Lego Friends. *The New York Times*. 11/29

DesignBoom (2014) claire healy + sean cordeiro interweave LEGO and IKEA furniture (DesignBoom.com)

Lauwaert, M. (2008) Playing outside the box – on LEGO toys and the changing world of construction play. *History and Technology* 24(3) 221-237

Lipkowitz, D. (2011) The LEGO Ideas Book

Ohlheiser, A. (2014) Lego's new female scientists set already has an awesome new Twitter tribute. *The Washington Post* 8/12

Robertson, D. & Breen, B. (2013) Brick by Brick: How LEGO Rewrote the Rules of Innovation and Conquered the Global Toy Industry.

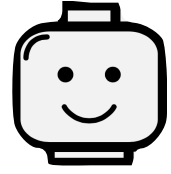
Schmidt, G. (2014) Lego Builds an Empire, Brick by Brick. *The New York Times*. 2/14 (Business Day)

Schultz, M & Hatch, M.J. (2003) The Cycles of Corporate Branding: The Case of the LEGO Company. *California Management Review* 46(1) 6-26.

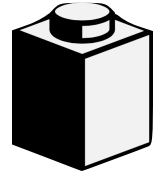
Williams, K. et al. (2012) Enriching K-12 Science and Mathematics Education Using LEGOs. *Advances in Engineering Education*. 3(2)

ASSIGNMENTS

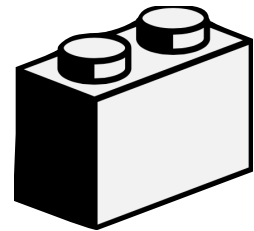
Participation: as this is a seminar-based course, participation is a major component of students' work. Students are expected to come prepared to class, to be active participants in class discussion, and to be reflective of their contributions to the course community. Students will also build LEGO sets weekly and discuss their creations with classmates in the context of readings.



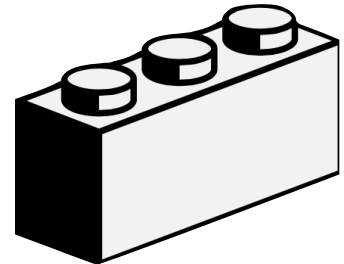
Assignment 1: Students will interview a friend or family member of their choice about their favorite LEGO experience/set, following best practices for oral interviewing. Students will then find illustration(s) and information regarding the set and post the resulting entry onto the allthetoys.org database developed by Dr. Fernsebner from the History Department. *This assignment is an exercise in oral history and multidisciplinary, and is designed to encourage students to interact with the university and community.*



Assignment 2: LEGO are commonly used in science, engineering, the arts, advertising, and other fields. Students will choose one such field and discuss how LEGO have been implemented, used in the field, and/or advanced research. Students are expected to use at least five references and include a formatted bibliography with their paper. Paper should be 1000-1500 words. *This assignment is an exercise in primary and secondary research and analysis.*



Final Assignment: Students will design a LEGO set including formatted instructions (component list, building instructions) and a 500-1000 word rationale of its meaning among existing LEGO sets and the wider world. The final set instructions and rationale will include multiple illustrations and references to primary and secondary sources. Students will also present their work and related graphics in class in a formal 10 minute presentation.



Proposals must be submitted and approved before proceeding with this project. Students are strongly encouraged to visit the Speaking Center prior to presenting their project. *This assignment is an exercise in creativity and synthesis.*

More detail on all course assignments will be provided throughout the semester and will be accessible on the course website.

GRADED COURSE REQUIREMENTS	WEIGHT
Class Participation	20%
Assignment 1	15%
Assignment 2	15%
Final Assignment: Presentation	15%
Final Assignment: Design & Report	20%

COURSE SCHEDULE

WEEK 1	Introduction What is LEGO?
WEEK 2	History of the LEGO brick <i>Readings: Basulto 2014, Schmidt 2014</i>
WEEK 3	Other building toys: How are they different? <i>Readings: Robertson & Breen 2013, Schultz & Hatch 2003</i>
WEEK 4	LEGO in varied media: what is gained/lost in 2-D? <i>Play: LEGO online and video games</i>
WEEK 5	LEGO and the tension between creativity and directions <i>Screening: the LEGO Movie</i>
WEEK 6	LEGO in K/12 education <i>Readings: Williams 2012</i>
WEEK 7	LEGO in engineering <i>Readings: Lauwaert 2008, Robertson & Breen Chapter 7</i>
WEEK 8	Fall Break
WEEK 9	LEGO in the design fields <i>Readings: DesignBoom 2014, Lipkowitz pp. 42-57</i>
WEEK 10	LEGO in research <i>Readings: Abrams, 2014</i>
WEEK 11	LEGO and gender/identity <i>Readings: Dell'Antonia 2012, Ohlheiser 2014</i>
WEEK 12	LEGO Hacking <i>Readings: Lipkowitz, pp. 168-199</i>
WEEK 13	The Future of LEGO <i>Readings: LEGO.gizmodo.com (choose 3 entries to read and present)</i>
WEEK 14	Thanksgiving
WEEK 15	Final Assignment Presentations
WEEK 16	Final Assignments Due