Waldorf High School Teacher Education Program

Second/Third Year Course Syllabi

July 2025

HS 216/316 Esoteric Science: Rhythm in Cosmos, Nature, and Evolution

Credits 2

Faculty: Paul Gierlach

I Projected Learning Goals and Objectives

A student once asked Rudolf Steiner, "What is life?" He responded: "Rhythm." This response is more complicated than it seems. In fact, we will use this course to broaden and deepen our appreciation of it. We will see how the rhythms that were established in cosmic planetary evolution are repeated in diverse ways in the stages of Earth evolution, in the subsequent post-Atlantean epochs, in our daily lives. These patterns can help us make sense of the Universe and our place in it. We will be especially attentive to repetitions that occur in stages of three or seven.

Rhythm is also an important element of our ability to use and develop our memory so that we have a mastery of it. Without a memory, a human being is not able to take up a destiny because s/he is incapable of establishing the Ego nature of Self-consciousness. We will venture into some of our deeper pedagogical concerns as we discover the relationships of rhythm and memory. We will see how important it is for human beings to nurture and further develop their picture-making capacity.

Rhythm also will open up of view into the future, which can seem to come toward us.

All the above will lead us to a deeper appreciation of the mysteries of the ether body and its significance for the future of education and culture as we know it. We will explore the thought: modern life is a form of assault on the ether body of a human being.

II Overview of Course Content and Methods

We as human beings can have the self-conscious thought: I exist right now, I have existed (in the past) and will continue to do so (in the future.) In Anthroposophy, this thought has a weighty reality, however much our present times and way of thinking wants to deconstruct it, epistemologically and in actuality.

The Past: the human and earth (Nature) condition will arise from what Rudolf Steiner describes as the Saturn, Sun, Moon planetary evolutionary phases;

The Present: Earth evolution, especially the period of Lemuria to the present Fifth post-Atlantean Age, will help us picture our immediate personal, natural and civil reality;

The Future: certain elements of the second half of Earth evolution, and Jupiter, Venus and Vulcan stages of cosmic evolution will serve as challenges to our conception of our selves and our appreciation of the surrounding cosmos.

Rhythm can have many different meanings in our lives. We will use the artistic section of our lessons to bring to our general awareness as many of these different manifestations as we can. Rhythms in nature. Rhythms in human nature (sleeping and waking, for example). Rhythms in

artistic media (weaving is quite different from clay modeling.) Music. Our intention is not to collect specimens but vitalize our abstract notions of this all-important element of life, rhythm. Our approach in this artistic realm will be phenomenological; our goal is to uncover the health-giving aspects of the arts. We will try to create healthy forms when we complete Years 3 and 4 of Dynamic Drawing.

When we approach the question of rhythm in a more comprehensive, conceptual manner, we will work quite differently: we will begin with as broad an approach as possible – cosmic planetary evolution – and slowly condense our field of vision to the high school years of the students we teach. That is, we will work from the whole to the parts.

III Topics and Reading List

In order to prepare for this course, please read *Outline of Esoteric Science, (chap. 4, 6)*. The texts listed below serve as excellent supporting literature.

Influence of Spiritual Beings Upon Man, Steiner. (lectures 4-6) Cosmic Memory, Steiner. (essays i – viii) Foundation Stone Meditation, Steiner.

IV Evaluation

Students are expected to do the readings, participate in class discussion, and offer examples of rhythm in the morning artistic activities.

HS 218 Professional Seminar (Level II)

Credits: 1

Faculty: Paul Gierlach

I Projected Learning Goals and Objectives:

- Identify a subject area of interest to you that could become a year-long research project.
- Experience different approaches to independent research in order to model them in the future with your students.
- Write up the Research Project in the proper format and submit to the program director by the end of the summer session.

II Overview of Course Content and Methods:

- The content is determined by the students' interest;
- If necessary, at least three writing exercises will help with identification and refinement of one's thinking: free writing, clustering, and the carousel.
- Group conversations will support the individual who, in turn, will enliven the group.
- At times, independent work will be done during the sessions.
- Familiarity with viable literature and research in your fields of interest would be useful during all discussions.

III Verification Requirements and Evaluation Methods:

Students will be evaluated on class participation and progress in preparing their independent research project.

IV Required Reading:

As needed in your different fields.

HS 318 Professional Seminar (Level III)

Credits: 1

Faculty: David Barham

I Projected Learning Goals and Objectives:

This seminar, focusing on the professional development of the teacher, will complement the various subject seminars by taking up practical topics of common concern to all Waldorf high school teachers, including the gentle art of qualitative research. The format will be interactive, with students and faculty sharing observations and roles.

II Overview of Course Content and Methods:

Particular attention will be paid to the social questions arising in our schools, including initiatives of Inclusion, Diversity, Equity, and Access, or what is sometimes billed as "The Big IDEA" informing our-day-to-day teaching. Exercises to warm up a class, rhythms in teaching, different learning styles, and techniques for addressing different age groups will be folded into these considerations through a study of Rudolf Steiner's aphoristic lecture cycle *Balance in Teaching*.

These sessions will be practical in nature, taking the form of discussions, exercises, skill building, role plays, and so on. Students will be asked to suggest ahead of time burning questions and topics that they would like to explore in the context of this seminar.

III Verification Requirements and Evaluation Methods:

Evaluation of students will be based upon their involvement in the seminar, including their presentation of short "case studies" and scenarios.

IV Required Reading:

Rudolf Steiner, *Balance in Teaching* (Great Barrington: SteinerBooks, 2007).

HS 120/220/320 Subject Seminar: Life Sciences

Credits: 2

Faculty: Michael Holdrege

I Projected Learning Goals and Objectives:

The students learn how Waldorf education and a goethean/phenomenological approach to science are applied and developed in the teaching of life sciences in a Waldorf high school from grades 9-12.

II Overview of Course Content and Methods:

The seminar will focus on:

- How the life sciences curriculum in grades 10 & 11 can help students learn complex and holistic thinking
- Content out of the curriculum (grades 11-12)
- The form ("gestalt") of a main lesson

III Verification Requirements and Evaluation Methods:

The evaluation of the students is based on classroom participation and the work they have completed during the independent study period to prepare for the seminar, including independent research project (written) and presentation.

IV Readings:

As specified in the "Guidelines for Independent Study: Life Sciences"

HS 122/222/322 Subject Seminar: English Literature

Credit: 2

Faculty: David Sloan

I Projected Learning Goals and Objectives:

Since this is the first summer session in which we are combining first year and second/third year students, we may spend some time reviewing some of the fundamentals of Waldorf pedagogy, including: the three-part lesson; an overview suggesting what and why we might include in a four-year literature sequence; a "phenomenological" approach to teaching English; and the desirability of incorporating speech work into lessons. Participants will continue to deepen their exploration of adolescence and how the curriculum, especially in the eleventh grade, can both mirror and foster transformation into young adulthood.

However, the winds of change are blowing briskly through Waldorf high school classrooms. We will consider how to assess which courses in the "traditional canon" to keep, and which—if any—to supplant or supplement. The seminar will focus on junior year literature blocks, including any presentations that the participants have been preparing during their independent studies. Since many of the participants are currently teaching inWaldorf settings, their questions and challenges will help inform and direct our discussions.

II Overview of Course Content and Methods:

Eleventh grade is a year of inner and outer journeys, of quests and questions. We will pay particular attention to *Hamlet* as a bridge from the Medieval Ages to the Modern Age. We will also explore Dante's *Inferno* and Von Eschenbach's *Parzival*. Time permitting, we may also take a brief look at Chaucer's *Canterbury Tales* and/or the Romantic poets, as well as how to prepare high schoolers to write a major comparison/contrast paper. We may also consider why Goethe's *Faust* was long a staple of many twelfth grade curricula.

III Verification Requirements and Evaluation Methods:

Evaluation of students will be based on their presentation of research undertaken during their independent study, as well as on classroom participation and any short writing assignments.

IV Suggested Readings:

Margaret Bennell, *Shakespeare's Flowering of the Spirit* (East Grinstead: Lanthorn Press, 1971)

Ralph Waldo Emerson, *Selections*, ed. Whicher (New York: Houghton Mifflin, 1957)

D.E. Faulkner Jones, *The English Spirit* (London: Rudolf Steiner Press, 1982)

Johann Wolfgang von Goethe, *Faust*, trans. Kaufmann (Garden City: Doubleday/Anchor Books, 1961)

A.C. Harwood, *Shakespeare's Prophetic Mind* (London: Rudolf Steiner Press)

David Sloan, Life Lessons (AWSNA Publications, 2007)

Linda Sussman, *The Speech of the Grail* (Lindisfarne Books, 1995)

Betty Staley, *Adolescence: The Sacred Passage (*Rudolf Steiner College Press, 2006)

Betty Staley, Splinters of the Sun (AWSNA, 2008)

HS 124/224/324 Subject Seminar: History

Credits: 2

Faculty: Paul Gierlach

Syllabus:

We have three summers to prepare ourselves to teach four years of history in the Waldorf high school curriculum.

All history is understood from a point of view. Our work is no exception to that necessary approach: we find that history is the biography of humanity. We are who we are at this moment of our lives because of what has happened in the past. Now, what lies at the heart of our comprehension and teaching of history is the Anthroposophical conviction that a human being is actually a spiritual being who is taking on the task of being human. We learn how to be human in all senses of the word. When we account for the records of human activity on this earth for the past five millennia and more, we can look quite broadly at this human activity and say: in the distant past, humanity shared a one-ness in its nature that, over time and for many reasons, evolved into the creation of many cultures that spread over the face of the globe. Some cultures died, some expanded into what we can call civilizations.

Historians look at these cultures from many different perspectives, yet all are founded on the thought: there is an intimate relationship between an individual and the society created by that individual or groups of individuals. Most historians have tended to explore the societies created by human beings; we will augment those studies with our understanding of the individual's nature and role. Our work, then, will concentrate on the evolution of consciousness, for within this perspective we can truly find our historical and personal selves.

All human beings consider themselves as a continuum of past, present, and future. In like manner, through the lens of consciousness' changing awareness, we can in studying history revitalize our understanding of the past, engage effectively in the present, and build a future that meet's humanity's true need: to use our earthly selves to realize the spiritual longings in our souls.

Overview of Course Content and Methods:

We will do the following in the three summers sessions of CfA.

Each summer we will explore the five millennia of humanity's existence on the earth by looking into **the seven stages of the evolution of consciousness** that bring us up to the present. We will focus on the relationship between individuals and the societies (communities) they naturally create and inhabit. In this way, we will breathe some air into the questions of caste, gender, race, ethnicity, nationalism, political opinions, religious persuasions, et al and create a panorama of human activity and concerns within which we can find ourselves and every society existent on this remarkable globe we inhabit. We will have something substantial to add to the historical quest to appreciate, identify, and understand cycles of human/cosmic activity.

Each summer we will work consciously with **the three elements of all successful societies**: the cultural element, the legal agreements, and economic activities. The character of any given society can be uncovered when we see how these three elements are internalized, integrated. To create a living picture of this human activity, each year we will focus our primary attention on one of the aspects as we journey through the past five millennia:

| 2024 | concentration on the changing views/realities of the legal arrangements |
|------|--|
| 2025 | concentration on the changing reality of the cultural world |
| 2026 | concentration on the changing dynamic and power of the economic forces |

Thus, in our three years together we will look at the panorama of human activity three times from three points of view that arguably are the essential three parts of both individuals and societies. When we include specific geographic, climatic, ecological, cosmic facts to the conceptualization, we create a lively picture of our selves over time and place indeed.

Each summer we will **learn techniques of teaching in a Waldorf high school** so that we teachers can create an environment in which every student in front of us can be ready to meet the future when they graduate. A more contextual way of saying that is: help each individual see the self that needs must create and participate effectively in selected future social groupings. We will be eminently practical in our approach, dealing with all classroom topics, as varied as note taking, homework assignments, behavior, report writing, different learning styles, toxic excess, social issues, reading, AI – to name a few.

As we work together for three years, we also will develop skills that, being transportable, can offer support for our working with our respective faculties and school milieus.

Evaluation:

The course expectations are quite simple and reflect the demands teachers make of their students: participate, do all required assignments, inwardly engage. As a group, we will make a list of books, sites, videos, et al that we can use in our teaching.

Required Reading:

There are four texts that are the backbone of the three-year course:

Saving the Appearances, Owen Barfield In the Shadow of the Machine, Jeremy Naydler World History in the Light of Anthroposophy, Steiner Anthroposophical Leading Thoughts, Steiner

More, additional texts and handouts will be assigned each summer.

HS 126/226/326 High School Subject Seminar: Mathematics

Credits: 2

Faculty: Marisha Plotnik

I Projected Learning Goals and Objectives:

To experience mathematics as a study of number (arithmetic) and space (geometry) expressible through algebraic and other representations; to deepen and broaden connections with central topics in mathematics; to perceive the special role that mathematics can play in the development of thinking (particularly in adolescence); to study curricula (for main lesson blocks and ongoing classes) and gain experience in refining them; to practice a variety of modes of engagement (in preparation, in classroom practice, in reviewing student work).

II Overview of Course Content and Methods:

Each summer, a focus of our seminar sessions will be a multi-modal encounter with a particular topic in mathematics (e.g. the conic sections, trigonometry, exponential and logarithmic functions). Modalities will include compass-and-straightedge constructions, analytic geometry, and numerical methods. In their second and third summers, participants will present their action-research on curricula (through an ongoing cycle of observation, reflection, and innovation) and on topics in mathematics.

Through conversation, shared objectives for the teaching and learning of mathematics in the light of Anthroposophy will be developed, and practical classroom techniques will be offered. Differentiating instruction for groups with heterogeneous skills and maximizing student engagement (during and between lessons) will receive particular attention.

Recommended Reading:

Andrews, George E. (1971). Number Theory. Dover.

Holdrege, Henrike (2019). To the Infinite and Back Again: A Workbook in Projective Geometry. Evolving Science Association.

Lockhart, Paul (2009). A Mathematician's Lament. Bellevue Literary Press.

Neumann, Robert (Ed.) *Topics in Mathematics for the 9th Grade*. Waldorf Publications.

Neumann, Robert (Ed.) Topics in Mathematics for the 10th Grade. Waldorf Publications.

Neumann, Robert (Ed.) Topics in Mathematics for the 11th Grade. Waldorf Publications.

Neumann, Robert (Ed.) Topics in Mathematics for the 12th Grade. Waldorf Publications.

Sigler, Stephan (2020). *Mathematics in Waldorf Schools: Teaching Mathematics in the Upper Grades*. Pädagogische Forschunsstelle beim Bund der Freien Waldorfschulen.

Stillwell, John (1998). Numbers and Geometry. Springer Verlag.

HS 128/228/328 Subject Seminar: Physics & Chemistry

Credits: 2

Faculty: Cedar Oliver

I Projected Learning Goals:

Each participant will be encouraged to develop an understanding of the methods associated with phenomenological or sense-based science. Comparisons between the methods of sense-based science and more classical approaches will be both encouraged and investigated. The emphasis will be placed on developing understanding through individual experience so that later presentations in the classroom are rich and authentic. The physics curriculum in all four grades may be briefly surveyed but major emphasis will be on the 11th and 12th grade. Various discussions concerning implementation of the curriculum and the relationship to the developing adolescent will also take place.

II Overview of Course Content and Methods:

The class will have two central themes. The first will be to work with various phenomena associated with the curriculum to illustrate the methods used in the classroom while also giving the participants an active experience of how to demonstrate the phenomena. Most of these examples will be drawn from the more challenging topics associated with the 11th grade Electricity and Magnetism block and 12th grade Optics block. Secondly, the class will focus on integrating multi-cultural scientific knowledge and explorations from throughout history and prehistory with the goal of a genuinely inclusive education.

III Verification Requirements and Evaluation Methods:

The evaluation of students will be based upon participation in class and brief assignments generated during the course.

IV Readings:

The instructor will provide readings and sources as needed during the course.

HS 128/228/328 Subject Seminar: Arts and Art History

Credits: 2

Faculty: Michal Noer

I Projected Learning Goals:

Building on the work of the previous year, we will continue to practice and discuss the crafts and visual arts curriculum for the middle and high school years.

II Overview of Course Content and Methods:

This time is open for guided individual pursuits of personal interest and/or areas that need improvement - drawing, clay modeling, a deepening of art history studies, stone carving, etc. Materials would need to be procured by students.

III Materials:

As needed, and acquired by students.

IV Suggested Reading:

Michael Howard, Educating the Will (AWSNA, 2004)
David Mitchell and Patricia Livingston, Will-Developed Intelligence:
The Handwork and Practical Arts Curriculum in Waldorf Schools
(Waldorf Publications, 1999)

HS 232 Workshop in the Arts: Drama II

Credits: 1

Faculty: David Sloan

I Projected Learning Goals and Objectives:

The aim of this workshop is to help participants strengthen the tools of the teacher as well as the actor -- speech, gesture, inner mobility, imagination, presence of mind, the ability to improvise, powers of observation, ensemble awareness.

II Overview of Course Content and Methods:

We will recap the work of the first-year course, using a variety of drama exercises to develop character and relationship. Most of our energies will be spent exploring—and then embodying—planetary qualities, and how understanding them might prove useful in the classroom. Improvisational techniques may provide the basis for never-before-imagined and never-again-performed scenes.

III Verification Requirements and Evaluation Methods:

Evaluation will be based solely upon the fullness of students' participation.

IV Suggested Readings:

Peter Bridgmont, *The Spearthrower* (An Grianan, 1983) Michael Chekhov, *To the Actor* (Harper and Row, 1953) Keith Johnstone, *Impro* (Routledge, Chapman and Hall, 1979) David Sloan, *Stages of Imagination* (AWSNA Publications, 2001) Viola Spolin, *Improvisational Theatre* (Northwestern, 1963) Rudolf Steiner, "The Spiritual Individualities of the Planets" HS 234/334 Workshop in the Arts: Eurythmy II/III

Credits: 1

Faculty: Laura Radefeld

I Projected Learning Goals and Objectives:

This course is designed to deepen the experience of the art of eurythmy and its context in the Waldorf high school curriculum. As an upper level course, it assumes participants have taken teacher education eurythmy level I or its equivalent.

The goals of this course are:

- Continue to develop understanding and appreciation for eurythmy and its role in the high school
- Facilitate a deeper understanding of Rudolf Steiner's vision of the human being through eurythmy
- Facilitate understanding of eurythmy as a path of development of "initiative of soul and initiative of will"

This course also aims to give tools to experience eurythmy as a support to ongoing personal and professional development as a Waldorf teacher. It will bridge eurythmy with themes from the curriculum through poetry, music, movement styles, etc.

Classes will require some documentation of course work.

II Outline of Topics to be Covered:

Basic principles of eurythmy including poetry and music from the high school curriculum, social learning through eurythmy, and making inner experiences visible through outer forms/choreography and gesture.

Hygienic eurythmy for the teacher, planetary eurythmy gestures, consideration of high school students' experience of eurythmy.

Students present their work at the conclusion of the course at an assembly.

III Evaluation:

Students will be evaluated on the basis of attendance, class participation, and required documentation of class work.

IV Requirements:

Students are expected to attend and participate in all classes, participate in final showing of work. Students should bring eurythmy shoes (or purchase them at the Center's bookshop prior to the first lesson), an unlined journal, pencils, eraser, and colored pencils. Class dress should be appropriate for movement: loose fitting and comfortable. Please bring clothing appropriate for a final presentation of work: loose, flowing clothing, light colored, that covers arms and legs.

V Prerequisite Reading:

"The Being of Eurythmy" by Michael Debus (available before the start of the course)

Eurythmy, A Creative Force in Humanity by Sylvia Bardt. (This book is an excellent resource for anyone seeking to understand why eurythmy is important within a Waldorf School curriculum.)

HS 239/339 Workshop in the Arts: Sculpture II/III

Credits: 1

Faculty: Michal Noer

I Projected Learning Goals and Objectives:

A further deepening of the practice of clay sculpture in its fundamental artistic principles constitutes the basis of this course. The importance and relevance of the artistic exercises as supportive of adolescent development is reviewed and discussed, especially in relation to the content of Rudolf Steiner's *Study of Man*, other references, and reflections on one's own experiences.

II Overview of Course Content and Methods:

Following an introduction or review of the day's theme, classes will consist of demonstrations and guided sculptural practice.

III Outline of Topics to be Covered:

- * Review of fundamentals from previous courses
- * Modeling the Human Head in Clay
- * Modeling the Human Head, continued
- * Modeling the Human Head to its completion

IV Verification Requirements and Evaluation Methods:

Students will be evaluated on their willingness to engage fully in the creative process.

HS 240/340 Workshop in the Arts: Bothmer Gymnastics/Spacial Dynamics II

Credits: 1

Faculty: Jan T. Lyndes MEd

I Projected Learning Goals and Objectives:

Through the lens of Bothmer Gymnastics and Spacial Dynamics we will continue to explore a deeper understanding of movement and spatial awareness, in the context of Spiritual Science and human development. Embodied experience of Anthroposophical core texts (Philosophy of Freedom/ Foundations of Human Experience/ How to Know Higher Worlds) will be explored and parallels developed. Developmentally appropriate movement activities for high school-age students will be taught and experienced. Curiosity about one's current relationship to Form and Freedom is a key element to taking up the depth of our work together.

II Overview of Course Content and Methods:

Through Bothmer Gymnastics/ Special Dynamics exercises, movement activities, and games we will explore themes such as:

- * Gravity and levity, human uprightness; as pertains to the 14-19 year old.
- * Personal, social, interpersonal, supra-personal space; pedagogically lens.
- * The relationships of the planes of space, thinking, feeling, and willing, 9-12th grade.
- * Pedagogical use of: movement and countermovement, center and periphery, rhythms and dynamics in movement and space.

III Verification Requirements and Evaluation Methods:

Naturally there will be a variance in levels of ability among the participants. Activities will be modified to meet students where they are at now, and students will be asked to take part as fully as possible, not merely in their thinking but also a willingness to engage in the movement activities. One who holds an inner gesture of openness to the possibility of change and further development in their gestalt, will find that "Space moves first".

Summary of Preparatory Readings (Second & Third Year Group: Classes of 2024 & 2025)

For HS 216/316: "Esoteric Science: Rhythm in Cosmos, Nature, and Evolution" Required:

In order to prepare for this course, please read Outline of Esoteric Science, (chap. 4, 6). The texts

In order to prepare for this course, please read *Outline of Esoteric Science*, (chap. 4, 6). The texts listed below serve as excellent supporting literature.

Influence of Spiritual Beings Upon Man, Steiner. (lectures 4-6) Cosmic Memory, Steiner. (essays i – viii) Foundation Stone Meditation, Steiner.

For HS 218: "Professional Seminar" (Level II)

Rudolf Steiner, Basic Issues of the Social Question (GA 23) – available in book form as Towards Social Renewal or online at

 $http://wn.rsarchive.org/GA/GA0023/English/SCR2001/GA023_index.html\#sthash.bCa19FTW.dpuf$

For HS 318: "Professional Seminar" (Level III)

Rudolf Steiner, Balance in Teaching (Great Barrington: SteinerBooks, 2007).

For HS: "Subject Seminars"

Assigned readings will be different for each subject area. See the "guidelines for independent study" handed out at the end of the last July summer session, as well as the syllabi for the subject seminars included in this packet:

For Life Sciences: HS 120/220/320 Required:

Holdrege, M. (2022). From Mechanism to Organism. Waldorf Publications.

Suggested:

Rohen, J. (2007). Functional Morphology. Hillsdale, NY: Adonis Press. McGilchrist I. (2010) The Master and His Emissary. New Haven: Yale Univ. Press. Bortoft H. (1996). The Wholeness of Nature. Great Barrington: Lindisfarne Press.

For English: HS 122/222/322

In addition to listings in the independent study guidelines, the following texts are suggested:

Margaret Bennell, Shakespeare's Flowering of the Spirit (East Grinstead: Lanthorn Press, 1971)

D.E. Faulkner Jones, *The English Spirit* (London: Rudolf Steiner Press, 1982)

Johann Wolfgang von Goethe, *Faust*, trans. Kaufmann (Garden City: Doubleday/Anchor Books, 1961)

A.C. Harwood, *Shakespeare's Prophetic Mind* (London: Rudolf Steiner Press) Eileen Hutchins, *Parzival: An Introduction* (Temple Lodge Publishing, 2012) Eric Mueller, *Why Parzival* (Alkion Press, 2023)

David Sloan, *Life Lessons* (AWSNA Publications, 2007)

Linda Sussman, *The Speech of the Grail* (Lindisfarne Books, 1995)

Betty Staley, *Adolescence: The Sacred Passage* (Rudolf Steiner College Press, 2006) W. J. Stein, *The Ninth Century and the Holy Grail* (Temple Lodge, 1991)

For History: HS 124/224/324 Required:

Saving the Appearances, Owen Barfield

In the Shadow of the Machine, Jeremy Naydler World History in the Light of Anthroposophy, Steiner Anthroposophical Leading Thoughts, Steiner

For Mathematics: HS 126/226/326

Suggested: Andrews, George E. (1971). Number Theory. Dover.

Holdrege, Henrike (2019). *To the Infinite and Back Again: A Workbook in Projective Geometry*. Evolving Science Association.

Lockhart, Paul (2009). A Mathematician's Lament. Bellevue Literary Press.

Neumann, Robert (Ed.) *Topics in Mathematics for the 9th Grade*. Waldorf Publications.

Neumann, Robert (Ed.) Topics in Mathematics for the 10th Grade. Waldorf Publications.

Neumann, Robert (Ed.) Topics in Mathematics for the 11th Grade. Waldorf Publications.

Neumann, Robert (Ed.) Topics in Mathematics for the

12th Grade. Waldorf Publications.

Sigler, Stephan (2020). *Mathematics in Waldorf Schools: Teaching Mathematics in the Upper Grades*. Pädagogische Forschunsstelle beim Bund der Freien Waldorfschulen.

Stillwell, John (1998). Numbers and Geometry. Springer Verlag.

For Physics & Chemistry: HS 127/227/327

Required: Stephen Edelglass et al, The Marriage of Sense and Though: Imaginative

Participation in Science

Suggested: Rudolf Steiner, Warmth Cours Georg Unger, Forming Concepts in Physics For Arts and Art History: HS 128/228/328 Required: Michael Howard, Educating The Will

Suggested: David Mitchell and Patricia Livingston, Will Developed Intelligence - Handwork and Practical Arts in Waldorf School

Arthur Auer, Learning about the World through Modeling
Margrit Junemann/Fritz Weidmann, Drawing and Painting in Rudolf Steiner School

For Drama: HS 232

Peter Bridgmont, *The Spearthrower* (An Grianan, 1983) Michael Chekhov, *To the Actor* (Harper and Row, 1953) Keith Johnstone, *Impro* (Routledge, Chapman and Hall, 1979) David Sloan, *Stages of Imagination* (Waldorf Publications, 2001) Viola Spolin, *Improvisational Theatre* (Northwestern, 1963) Rudolf Steiner, "The Spiritual Individualities of the Planets"

For Eurythmy: HS 234/334

"The Being of Eurythmy" by Michael Debus

Eurythmy, A Creative Force in Humanity by Sylvia Bardt