

# KEPLER COLLEGE EDUCATION PROGRAM

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## INSTRUCTOR HANDBOOK



*Welcome and best wishes for a fulfilling teaching  
experience.*

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## OVERVIEW

### Kepler's Mission

The Mission of Kepler is to create a learning environment which is conducive to the development of critical thinking and promotion of the best practices in astrological education. Kepler seeks to prepare students with the attitudes, skills, and habits of lifelong learning, enabling them to be useful members of a modern global society.

Kepler also aims to provide sound continuing education for those already in astrological practice.

We want our students to learn how to learn and become passionate about their learning.

### Learning Goals

Kepler wants its students to become well-rounded in the field of astrology, with a grounding not only in techniques, but an understanding of astrology's long history and philosophies as well as the different choices that astrologers through the ages have made with regard to their practice. This handbook is to give instructors an understanding of how they can help Kepler achieve this goal as well as to clarify how interactions between the Kepler administration, students and instructors work.

Below is an overview of Kepler's learning goals. The Instructor Course Preparation material at the end of this document provides more details.

Kepler courses should be designed to help students:

- Develop Critical Thinking skills to apply to astrological practices
- Understand how astrological approaches have changed
- Expand astrological vocabulary
- See multiple perspectives about course content
- Achieve course objectives
- Identify assumptions, perceptions, and filters which could interfere with their ability to present astrological information to others
- Explore the underlying heritage and philosophy of astrological knowledge and practice
- Develop an ethical approach to the practice of astrology
- Understand the need for a systemic approach in applying astrological concepts and techniques

### Presenting Astrological Approaches or Techniques

We want to present astrological material in its larger context. To do that, students need:

- A historical context including underlying assumptions, philosophy and lineage
- Known major variations in application over time
- Inter-relationships with other methodologies
- Orientations and attitudes of authors
- Potential uses of methods and approaches
- Controversies surrounding variations in a specific approach or technique

### **Certificate Presentation Model**

Certificate classes are either 10 or 5 weeks in length. The student can expect to spend approximately **8-10 hours per week** on course work.

Students may take single classes, pursue certificates, or work towards a diploma. Several of our courses prepare students for qualifying exams at AFA, ISAR, and NCGR. Completion of our basic diploma will enable students to take the NCGR Level 4 certification without having to take the previous exams.

We currently allow open registration for any course. If there is prerequisite study that a student needs to be successful in your course, please clearly identify the specific skills needed and how the student can satisfy them.

## **Instructor Role**

### **Contractual Obligations**

Instructors are hired as independent contractors. This means that:

- Instructors can end the relationship at the close of any term or no later than one month prior to the course start date.
- A course can be cancelled because there are not enough students through the first week of any term. If a course is cancelled, the instructor is not paid.
- Courses in the Certificate Program must fit the educational goals and objectives of the Certificate or Diploma.
- Instructors choose how to meet the course objectives and own the copyright of their lectures and written material.
- Kepler expects that instructors will not offer the exact same course in a competing educational program. We wish to avoid any possibility of a pricing war with other schools. We also do not want students to assume that the course automatically transfers credits to Kepler as different schools have varied presentation and evaluation requirements.
- Instructors can offer their course to a student for no-cost or special discount. Instructors will receive the standard percentage based on what those students actually pay (i.e., no compensation for free and only a portion of compensation for an instructor discount) Instructors are still expected to evaluate the student's progress.
- Kepler can offer a discount or scholarship for a course. In this case, instructors will receive their regular pay as if the student had paid full price.

## Expectations for Certificate Courses

Quick overview:

- Students are expected to spend an average of 8-10 hours per week per course on course requirements.
- Live courses have a weekly 1-1/2 to 2-hour online session to cover the weekly material and give students a chance to interact, practice and ask questions.
  - Blended courses will have at least 3 live meetings in a 10-week period or 2 live meetings in a 5-week period that focuses on student interaction and questions.
  - Automated courses should have at least one live interaction with the student.
- Instructors will need to budget time for regular communications with students through discussion forums, questions and providing feedback on homework.
- Instructors should respond to student questions within 24 hours unless the instructor has set the expectation for when they are available to respond. (For example, the instructor can say that they will respond on Mondays, Wednesdays and Fridays.)
- Instructors need to prepare a final evaluation for each student on the Kepler evaluation form. They should send it to their students and the Kepler registrar no later than two weeks after the course has ended.
- The Education Director will oversee new courses or appoint a Kepler assistant for new instructor. This person will help instructors prepare the course site and may suggest changes to course structure in order to meet Kepler's educational objectives.
- Depending on availability, Kepler can provide a teaching assistant (TA) to work alongside the teacher. A percentage of instructor pay will be paid to the TA depending upon experience and level of work provided.

## Live Meeting Schedule

**Instructors should determine the time and day for course meetings no later than one month before the starting date.** Sometimes it will be difficult for all students to attend the live sessions because of their work or time zone. If the live sessions are part of a student's grade, instructors will need to decide how to handle students listening to the recording.

Please be aware that you need to coordinate with the office your choice of day and time because multiple instructors use the same conference service. In general, most students prefer classes on evenings or weekends. Try to avoid Saturday afternoons between 1:00-3:00 pm Pacific Time as that is when our Community Webinars are held.

## Course Preparation and Delivery

Follow the general guidelines given in the Instructor Course Preparation Manual (at the end of this handbook) or on the instructor website. Instructors can add course materials consisting of written, audio or audio-visual lectures, online links, handouts, etc. Instructors are responsible for adhering to copyright laws and regulations.

In general, courses require a course syllabus/outline and a weekly syllabus/outline plus additional resources that supplement instructor lectures and assignments to demonstrate learning and provide an opportunity for students to receive feedback.

## Required and Optional Reading

Along with the course outline, you need to identify any book(s) you want students to purchase for the course. Required texts for class should total no more than \$50. The instructor needs approval from the Education Director if they want a more expensive text. You can also have a list in the course site for “Optional” material.

**IMPORTANT:** *You must email the office your required texts at least one month before the course begins so that students have adequate time to purchase the materials.*

- Required materials are those that support your course objectives and that students need to complete their assignments.
- A required book may be a classic text. For anything written prior to 1923, you can likely find an ebook version that students can download for free.
- Avoid requiring additional books if you only intend to use information from one or two chapters.
- Do not assign out-of-print work unless you can find a source for adequate copies. Provide all known sources for purchase to the Kepler office so the names can be provided to students.
- Recommended reading assignment maximum 50-75 pages per week.

Note that you can reduce textbook costs by either finding a source of used texts or choosing to use an older edition. You may also find online texts and articles will fulfill your needs.

## The Interactive Course Site

The course website provides an organized structure divided into weeks. At the top of the course site, you need to provide a general course overview/syllabus, information on required readings, assignments, grading and how you will conduct the course.

Each week should have the weekly overview, a written discussion forum for students to interact with instructor and other resources as the instructor decides. These can include online quizzes, articles, links to other websites, uploaded assignments and more.

Kepler uses Moodle software. This is an open source course management system designed using sound pedagogical principles to help educators create effective online learning communities. New instructors will be provided guidance in designing their course using this software. There are also training materials and helpful hints on the Instructor website (the Faculty Lounge in Moodle). Visit <https://moodle.org/> for additional training materials. Last resort – call the Kepler office.

Preliminary work setting up the online course site must begin no later than one month before each term starts. The Kepler administration takes primary responsibility for creating the initial site structure. Instructors are expected to provide the content and modify the structure to meet their course needs each term.

**Enrolled students will have access to the course site one week before the term begins.**  
(You can hide all but the first week of the course if you choose.)

In addition to written material, it is recommended that instructors prepare short 5 to 10-minute audio/video lectures using a PowerPoint-style presentation to help highlight important concepts. Instructors can use Kepler's Vimeo subscription to store these recordings that can then be linked to their course site. The Kepler office can provide help with the creation of an audio-visual or audio only presentation.

## **The General Course Overview**

The general overview at the top of the course site provides specific details that enhance the course description used to market the course to the public. The general overview should include:

- Title of course
- overall goals and reasons for taking the course
- What students will know about and what they will be able to do by the end of the course
- The topics for each week so students can see how the overall flow builds their skills and learning to ensure they can successfully meet the overall goals and requirements of the course.
- Any required books and any optional readings they will find useful
- The types of activities they must complete (forum discussions, online meetings, papers, quizzes, labs or other assignments)
- How you will evaluate their work and understanding in order to give them a passing grade; optionally, you can also include any specific criteria you will use for a Pass with Distinction

## **The weekly overview:**

Each week you want to post information on what will be covered so that students can (1) see how that week fits in with the overall objective of the course, (2) understand what they should focus on for the week, and (3) what assignments they need to complete. The weekly overview should include:

- A general description of topic(s) that will be covered that week, highlighting the key points
- Specifics on what students will know about and what they will learn and/or be able to apply.
- Details on what they will need to do in order to demonstrate their learning for that week – activities and assignments you will use to help them learn and how you will evaluate their knowledge (this can include readings, discussion forums, projects, papers, blogs, quizzes, experiments, and uploaded assignments)



## **Preparation for the live sessions**

Kepler uses GoToMeeting for its online conferences. All live sessions are recorded. Students will be able to access the sessions and download their own copy.

The live sessions are not just a time for lecture, but also for real-time interaction between students and instructors. Kepler asks that instructors design the live sessions around these two important considerations: (1) Highlighting what is important in that week's material. (2) Giving students the chance to interact with you as well as with the material as they apply concepts, ask questions, and give opinions (with credible support).

The link to join will be at the top of the page in your online classroom. For new instructors or those needing extra help, Kepler will provide assistance with opening the live session and providing technical assistance. Recording is easy as you only need to click the record button. We reserve the right to charge for any additional personnel whose presence is required during the regular online sessions. Kepler is responsible for moving the recording to Vimeo storage.

Training for use of the online conference software is provided in the online teachers' lounge. For additional help, you can also contact the Kepler office.

Once you have experience you will still use the online meeting link in the class site but Kepler will give you the username and password to open the session. You will also record the session on your own. To do this, simply click on the record button and it will automatically be saved to the cloud. Kepler's Recording Coordinator will ensure the recording is uploaded to Vimeo for the students to access.

## **Final Evaluations – Overview**

(Appendix B has an example of Kepler's evaluation form.)

Evaluation of student work is one of the most important responsibilities of an instructor. Each term, evaluations must be written for each student assigned to you..

## **The Team-Teaching Model**

Because students benefit by having multiple viewpoints, Kepler encourages a team-teaching model. This could be two or more instructors who take different responsibilities for the course content or inviting a guest lecturer for one or more sessions.

## **Renewal of Instructor Contract**

Unless you are otherwise notified or decide not to teach, your instructor contract is usually automatically renewed. Non-renewal can occur for the following reasons:

- A change in Kepler's goals for its overall curriculum or a course that is consistently not getting enrollments.
- Repeated failure to submit evaluations on time.
- Consistent negative evaluations from students.
- Inappropriate interactions with students, such as attempting to sell or promote your products and services or other conflicts of interest which have not been disclosed and approved.

- Instructor misconduct or violation of Kepler policies related to privacy, educational integrity, communications, harassment, or grievances.
- Other violations of the instructor contract.

## General Information

**Adds/Drops/Withdrawals:** Any questions regarding these issues should be directed to the registrar ([registrar@keplercollege.org](mailto:registrar@keplercollege.org)).

**Auditing Students.** Auditing students are not required to submit assignments and instructors do not have to grade any work they submit, but their oral and written contributions may provide valuable perspectives.

**Guest Lecturers.** Guest lecturers will not be paid but can receive a free subscription to the Marion D. March Online Library for a year or sit in on a class with instructor permission or have access to past webinars. If you do this with someone on a regular basis, please submit their name and bio to the Kepler office for inclusion in the catalog.

## Student Evaluation Instructions

The Kepler Certificate Program uses a pass/fail system with a narrative evaluation. A sample completed evaluation is in Appendix B and on the Instructor website. Save the evaluation as a Microsoft Word document (.DOC or .DOCX) or .RTF or .PDF. Use the following naming format:

Last Name, First Name Course# School-Year Term Status (if incomplete add INC at the end)  
Smith, Jim W112 2019-2020 Fall Inc

Send a copy to the student AND to [registrar@keplercollege.org](mailto:registrar@keplercollege.org).

**The Registrar's office will maintain a record of all instructor and student evaluations.**

**The primary purpose of the final evaluation is to be a record of growth and accomplishment for the student.** You are evaluating the student's ability to successfully complete course objectives. Be careful about including personal life circumstance information or judgments about character or philosophy.

Kepler uses a pass/fail system. Therefore, you do not need to compute grade-point averages. Because of a student's individual circumstances, their record will show one of the following letter codes:

- P = pass (average of 70 % or better)
- PD = pass with distinction (average of 94% or better)
- I = incomplete
- NC = no credit/audit
- W = withdrawal

## Credit/Course Equivalencies

When a student applies to challenge a specific course equivalency, Kepler will evaluate their outside experience and/or previous knowledge on an individual basis

Student evaluations are not released outside the Kepler community. However, the student may waive confidentiality and allow for an employer or professional organization to receive confirmation of successfully completed coursework.

Student evaluations focus on the work for the course. Don't include personal comments about non-course related topics. You may mention student progress over time if you have had the student in prior courses.

Each evaluation briefly covers the following:

- Command of information covered in the program or course
- Understanding of central ideas
- Ability to think, verbalize ideas and plan strategies for problem solving
- The ability to think critically
- Diligence and effort
- Imaginative and creative use of subject matter
- Improvement over the term
- Completing written assignments and forum discussion posts in a timely manner
- Class contribution, i.e., participation in scheduled online discussions and study questions
- Recommendations for additional studies

Participation includes both a quantitative and a qualitative aspect – how often did the student participate in an activity and the quality of work done during participation. For example, did they ask pertinent questions? Did they understand the material? How well did they communicate their understanding? Did they assist others in understanding the material?

You can use the following core competency requirements as a guideline when filling out the evaluation. These are skills that Kepler promotes:

- **Knowledge and Understanding:** ability to apply and understand the concepts and techniques presented by the instructor.
- **Communication:** the ability to communicate effectively, both verbally and in writing.
- **Critical Thinking:** the ability to critique, analyze, synthesize and evaluate information, to respond creatively to concepts and experiences, and to be self-reflective.
- **Appreciation of the broader context:** the ability to reflect on the relationship between their personal cultural context as compared to the experiences and values of other people and cultures using astrological, psychological, philosophical, political, historical and/or cultural thought.
- **Personal Growth:** the ability to understand the dynamic relationship between theory and actual practice.

**File a student evaluation prior to the beginning of the next term regardless of whether the student has completed all materials.**

Submitting instructor evaluations of their students in a timely manner is a must. Every student has the right to receive a prompt and thorough evaluation of work completed. This is an essential element of the learning process and, therefore, of the teaching process.

It should be obvious that if an evaluation is to be timely, instructors need to design their course so the student can reasonably complete assignments in a timely fashion.

For example, if team teaching a course and there is an assignment for week 9 of 10, and the work is so extensive that none of the students have completed it by the end of the term, consider the possibility that the assignment expectation is unreasonable and needs revision.

Assignments due one week should be evaluated by the end of the next week. Do not delay in grading these interim assignments or it will be difficult to provide a final evaluation.

Instructors can (but are not required to) set specific deadlines for submission of assignments after which no or reduced credit will be received.

## **Incompletes**

The core courses (Fundamentals 1 through 6) allow students to take a course over two terms if they find they cannot complete the material in a timely fashion.

The student must notify the instructor if he or she wants to use this option.

For non-core courses, the instructor has the final say for any extension. However, in the event of severe or debilitating personal circumstances, and with the approval of the Kepler office, a student may be allowed to finish incomplete coursework during the next term in which that identical course is offered and at no additional cost.

**Inform students at the beginning of the course whether or not you will allow extensions and if so, under what circumstances.**

## **Miscellaneous**

Student work may be published with student permission in the Kepler newsletter, on the Kepler website or other promotional materials. If a student submits something of interest, please contact the newsletter editor for possible inclusion.

## **Record-keeping Requirements**

Instructors **must** maintain not current student records and the records of past students for up to one year after final evaluation.

# **EVALUATION OF INSTRUCTOR PERFORMANCE**

## **Student Evaluations of the Course and Instructor**

A survey on course content and satisfaction is given to students at the end of each term and asks for feedback on:

- Clarity in stated goals and objectives of course
- Course content matching course objectives
- Presentation and apparent preparation of online course materials
- Instructor knowledge of subject matter
- Timely responses to questions
- Content includes differing views
- Instructors value the students as individuals

- Fair and timely evaluation of assignments
- Coordination of instructors (if applicable)

## Administrative Review

As part of Kepler's ongoing development and in-house evaluation of Kepler's program, the Director of the Certificate Program or other member of Kepler's Administrative Council may be tasked to review your course and offer suggestions for improvement. They will evaluate:

- Classroom teaching methodology
- Appropriateness of offerings relative to stated course objectives
- Breadth and depth of material covered
- Use of historical/theoretical underpinnings and practical applications
- Incorporation of recent developments in the discipline
- Course content (including handouts and other supplementary materials)
- How well does course content match the course overview/syllabus
- Textbooks
- Assignments
- Interactions with students

## THE LEGAL STUFF: EMPLOYMENT CONTRACT

An employment contract will be issued to you stating the period(s) of your employment and remuneration. Payment is usually made during the third week of class.

### Resignation or Non-Renewal of Contract

Instructors are hired as independent contractors. Employment in one term or one year is not a guarantee of employment the following term or year. An instructor can resign at any time **up to ONE month before the starting date of a course** for either a specific term or for all future terms by email or hard copy correspondence to the Director of Operations.

When an instructor resigns or when their contract is not renewed, the following will apply:

**Complete all outstanding work.** Instructor agrees to satisfactorily complete outstanding teaching duties for previously taught courses. Your employment contract requires that you are responsible for taking a student through to a final grade (including an incomplete) by the end of the following term. If for any medical or legal reason you are unable to complete an evaluation for a student, that student's work will be turned over to the Director of the Certificate Program, who will consult with the Administrative Council to determine who will oversee the completion of the evaluation.

**Return any borrowed materials.** Instructor agrees to return any borrowed materials which may be in their possession.

**Confidentiality by Instructor.** Instructor shall not make any statements concerning Kepler that would tend to diminish the esteem, respect, good will, or confidence in which the school is held by past, present, or future students, potential students, members of the astrological community, members of the educational community. Instructors are also required to maintain confidentiality of student records in perpetuity.

**Confidentiality by Kepler.** The Administration (consisting of the President, Director(s) and Board of Trustees) shall not make any statements to anyone in the general astrological community, or past, present or future students at Kepler, concerning instructor's performance that would tend to diminish the esteem, respect or good will in which instructor is held by members of that community. In order to protect the integrity of legitimate credentials, Kepler may publish a list of individuals who are current and past instructors, with dates of service.

**Letter of recommendation.** If an instructor's contract is not renewed or the instructor resigns and asks for a letter of recommendation or lists a member of the Administration as a contact person in their application for employment, instructor waives their rights under the clause "Confidentiality by Kepler" only with regard to such recommendation or contact.

**Contract breach.** If Kepler or the instructor breaches the contract agreement, and there is a dispute between the parties, both the instructor and Kepler agree that mediation according to the procedures outlined below will be their first recourse.

**Mediation Proceedings.** Mediation may be requested in writing by either party to the President or Chair of the Board of Trustees. The Grievance Committee, consisting of the President, Director of the Certificate Program and the Chair of the Board of Trustees, will have responsibility for the initial review of any dispute. Unless someone else is specifically requested to participate, these are the only people involved.

All communications between the instructor and Kepler must include all members of the Grievance Committee. If a member of the Grievance Committee is the alleged source of the grievance, then that person will not be on the Grievance Committee to adjudicate the complaint. The Vice-Chair of the Board of Trustees, the Operations Director or other member of the Administrative Council may be requested to sit in their place as agreed to by each side.

Only after negotiations and mediation fail, can legal proceedings be instituted against either party for breach of contract. Each party agrees that their dispute will be submitted to binding arbitration proceedings under the laws of the State of Washington.

If such a suit were brought against an instructor, Kepler reserves the right to include a request for damages that include attorney costs and fees, costs related to hiring a new instructor, and additional damages if the resignation results in the Kepler's inability to offer all or a portion of a course required by students to complete their certificate in a timely fashion. Kepler also acknowledges that in the event of a lawsuit, the instructor may also request damages that include attorney fees and costs and other potential compensation.

## **POLICIES**

### **Non-Discrimination Policy**

Kepler College is committed to encouraging personal and intellectual growth in a democratic and cooperative setting and is committed to the principle of equal opportunity in education and employment. Kepler expressly prohibits discrimination against any person on the basis of culture, race, color, age, religion, gender, sexual orientation, geographical location, disability, religion, genetic information, veteran status, ancestry, national or ethnic origin, previous educational and/or work experience, and socio-economic background in the administration of

its educational policies, admissions policies, employment policies, scholarship and loan programs, and other administered programs and activities.

## **Written Communications Policy**

Because the Kepler program is online, most communication between instructor, students and administration is through texting, email, message board or the online discussion forums. This form of communication makes it easy to misinterpret meanings and emotions. When communicating in person, there are facial expressions, gestures, and tone of voice to communicate meaning. All that is unavailable when it is solely the written word.

Additional information on this policy can be found on the Kepler website under the FAQ, Policies section. An overview is listed below:

Kepler's written communication policies include the following rules:

- Re-read before posting. Once an email is sent or a message posted to a website, the sender has no control over the information.
- Do not forward private information sent by a specific student to another party unless the student has given permission.
- Do not post details about a student online without written permission by the student.
- If there is a disagreement with another person, don't voice that disagreement in any public venue. Phone the other person directly or email them to discuss the situation and only cc individuals who are directly involved or have a significant influence over the disagreement.
- If a significant disagreement is not resolved by email or phone, follow the grievance procedures and appeal for an outside negotiator.
- Kepler is a non-profit corporation. Do not send any commercial advertisement to a Kepler email list, such as all students in a class or all staff or all instructors or post a commercial advertisement in an online discussion or comment without checking with the Kepler office. If you think something could be construed as a commercial advertisement, clear it first with the Kepler administration.

## **Instructor/Student Interaction**

### **Instructor/Student relationships**

Kepler adopts the guidance from Stanford University:

*There are special risks in any sexual or romantic relationship between individuals in inherently unequal positions, and parties in such a relationship assume those risks.*

*Because of the potential for conflict of interest, exploitation, favoritism, and bias, such relationships may undermine the real or perceived integrity of the supervision and evaluation provided. Further, these relationships are often less consensual than the individual whose position confers power or authority believes.*

Just as it is unethical for an astrologer to have an intimate relationship with their clients, it is equally unethical between an instructor and their student and can result in termination of the instructor contract.

## **Use of Student Charts**

The delineation of a student's personal chart should **not** be the primary focus of classroom exercises. No student should be required to use their own chart for any assignment. Instead, all students should be asked to use a chart with A or AA-level data, which may or may not be their own chart based solely on the student's choice.

Kepler does **NOT** prohibit the use of charts in the classroom to examine and explain from an educational perspective how charts have been used historically through to the present, the sociological and cultural issues involved, nor is there a problem with comparing and contrasting how charts have been cast and interpreted by different astrological traditions.

However, from an educational and ethical perspective, any required use of student charts is strongly discouraged. The reasons?

- Personal charts have personal data (birth date and time), which should not be shared without express permission. If you do use a student's chart, black out or remove this information so the rest of the class cannot see it.
- Kepler approaches the subject of astrology from an educational perspective. Instructors cannot ethically work with an individual student to read their chart. So do not slide into a counseling session with the student if you do use personal charts. Keep the focus on what you are trying to present as an educational concept or practice.
- If you are using personal charts, you may consider removing that section from the recording of the class, particularly if the student is sharing private and personal information. Once the recording is sent to the students, there is no control over its use. A recording is just another file that can be shared, emailed, or uploaded.

Even if you do not specifically use personal charts for a live assignment, it may be appropriate to answer a particular question the student raises about their own chart related to the technique that is being discussed. But it is not appropriate to bring in unrelated techniques or to continue answering personal questions regarding the student's chart.

## **Privacy of Information**

Except for certain public information outlined below, student records are regarded as confidential and are maintained by Kepler primarily to benefit students in their educational and professional advancement.

### **Education Records**

Kepler protects the privacy of student education records except in limited circumstances. Students' educational records (including instructor and student evaluations) is kept private.



Unless otherwise requested by the student, the student's completion of Certificates or the Diploma will be posted on the Kepler website.

Kepler protects the privacy of instructor employment records. This includes instructor contracts, student evaluations of instructors and any grievance procedures.

A "student" is defined as anyone who is or has been in attendance at Kepler. It does not apply to records containing information gathered after a student has left Kepler.

A "record" means any information recorded in any way, including handwritten, printed, or electronic and computer media. Records relating to students that are not included are those that relate to a student as an employee; records maintained for law enforcement purposes; and notes prepared by an administrator or instructor that are used only by that person and are not shared with anyone else.

### **Privacy guidelines**

Do not disclose information contained in the student's records to anyone outside of Kepler without a student's written permission. If there are questions or concerns regarding release of information, please refer the parties involved to the Administration.

Since all classes are recorded, if you use private information about a student's birth information or private life in class, make sure you have the student's written permission or vocal permission on the recording.

If you use a student's chart in class, the visual information must be without the name and birth data.

Unless the student has notified the Kepler administration in writing, the following information will be considered public:

- Name
- State or country where the student lives
- Year certificate/diploma received

**Kepler does not release** any other information to the general public. Do not release:

- Information regarding a student's status
- Name(s), phone(s) and email address(s) of enrolled students
- Instructor evaluation of student's work

**All outside requests for information should be referred to the Administration, or at the very least, they should be informed of the contact for information.**

### **Student's Rights to See Records**

Students have the right to access their own educational records (including records held by an instructor). Students also have a right to request that Kepler correct records which they believe to be inaccurate or misleading.

## Contesting an Evaluation

Kepler's confidentiality policy is intended to protect the accuracy of records and the privacy rights of students and instructors. It is not intended to interfere with assessments or decisions of a substantive and evaluative nature made by instructor or other professional staff.

The Kepler administration will not change an award of credit made by an instructor based on the **quality of student work and whether the student met course requirements**.

However, Students can ask for a review by the Director of the Certificate Program if they believe there are **factual errors or statements which violate privacy rules**. The student must first try to find a resolution directly with their instructor.

If the case is not appropriate for review, the student and instructor will receive notice in writing within 30 days, stating the specific reasons for the determination. The student retains the right to place a statement in their self- evaluation commenting on the contested information and/or stating why the student disagrees with the final decision.

## THANK YOU & WELCOME

Again, welcome to the Kepler instructor. We hope your teaching experience is both fulfilling to you and rewarding. Please feel free to contact the Director of the Certificate Program if you have any questions regarding the curriculum design or presentation

Karen McCauley  
[karen.mccauley@keplercollege.org](mailto:karen.mccauley@keplercollege.org)

Or contact the Kepler office and one of the staff members will direct your call to the appropriate party.

## **APPENDIX A – THE ADMINISTRATIVE COUNCIL**

The Kepler Administrative Council (AC) includes Kepler’s President and/or Director of Operations, the Director for the Certificate Program and at least two additional instructors. The AC has responsibility for:

- The overall design and development of the Kepler Certificate Program, workshops and webinars
- Determining new courses and instructors
- Developing criteria for the evaluation of courses
- The review and evaluation of Kepler courses
- The enforcement of both instructor and student rights relating to educational freedom
- Auditing course design and criteria to ensure fair and appropriate student assessment criteria
- Monitoring course content to ensure students are engaged in the development of critical thinking skills, which includes, but is not limited to, the neutral presentation of multiple viewpoints when covering controversial material
- Monitoring the appropriateness of the credit assignments of classes

## **APPENDIX B – EVALUATION FORMS AND RUBRICS**

A rubric is a rating scale that measures performance outcome. It will contain various assessment criteria for different levels of performance and thus simplify your task of providing a final student evaluation. In addition, if used in your class, they help provide a student with clear grading criteria.

There are several rubrics included on the faculty website. They are not intended to be absolute guidelines, but to give ideas on how you can create a rubric for your own class. Or, they can simply be used to help focus your thinking about a student's work. They can also be useful in the written portion of your final student evaluation. You can include various phrases to help you better explain your designation of poor, fair, good or excellent.

If you create or decide to use a rubric in your final evaluations, it is helpful for students if you post it to your course site as well.

Below is an example of the final evaluation form to be completed for each student at the end of each course.

## Kepler Certificate Program Instructor Evaluation of Student Achievement

<b>Course:</b>		<b>Term &amp; Year:</b>			
<b>Student:</b>		<b>Instructor(s):</b>			
<b>Date</b>		<b>Grade:</b> [ ] Incomplete [ ] Pass [ ] Pass w/Distinction			
<b>PARTICIPATION</b>					
<b>Item</b>	<b>Excellent</b>	<b>Good</b>	<b>Acceptable</b>	<b>Needs Improvement</b>	<b>N/A</b>
Forums					
Online Meetings					
Homework Assignments					
Labs					
Papers					
Presentations					
<b>QUALITY OF PERFORMANCE</b>					
<b>Item</b>	<b>Excellent</b>	<b>Good</b>	<b>Acceptable</b>	<b>Needs Improvement</b>	
Knowledge and Understanding					
Critical Thinking					
Course Content Applications					
Communicates Ideas Clearly					
Observes Directions and Deadlines					
<p><b>COMMENTS</b> <i>(If an Incomplete grade is given, please be specific as to what must be completed and by when)</i></p>          					

Below is a sample grade report that can be used or adapted to provide you and/or your students more detailed information that helps clarify the information on the final evaluation form.

Week #	Discussion forums ( pts)	Conferences ( pts)	Assignments and quizzes ( _____pts)	Weekly Total	Week #
Weight	Weighting percentage – used to help calculate final grade	Weighting percentage –	Weighting percentage –	100%	Weight
<b>1</b>	<b>Discussion:</b>	<b>Live conference</b>	<b>Assignment:</b>	<b>Pts earned/pts possible</b>	<b>1</b>
2	Discussion:		Assignment	/	2
3					3
4					4
5					5
6					6
7					7
8					8
9					9
10					10
Total Grade	_____pts earned / _____pts possible	_____pts earned/ _____pts possible	_____pts earned / _____pts possible	_____pts earned / _____pts possible	Total Grade
Percent	% total % total after weighting	% %	% %	% total	

Grade Progress for: By \_\_\_\_\_ Dated; Instructor \_\_\_\_\_

Grade Scale: (Pass w/ Distinction = 92-100%) (Pass = 65-91%) (Not Passing = 0-64%)

Points / Percent

Awarded: \_\_\_\_\_/ \_\_\_\_\_% Instructor's Comments:

Grading Criteria: (modify based on course design)

Successful completion of weekly reading

Successful completion of discussion forum questions

Successful participation in live discussions

Successful completion of assignments

## APPENDIX C - INSTRUCTOR COURSE PREPARATION MANUAL

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BEFORE YOU WRITE A COURSE  
DESIGNING YOUR Overview  
PROPOSING A NEW COURSE OR CHANGING AN EXISTING COURSE  
COURSE SCHEDULING  
PREPARATION OF COURSE MATERIAL  
WRITING A COURSE SYLLABUS  
INTRODUCTION TO BLOOM'S TAXONOMY

### Before You Write a Course

Kepler's instructor contracts are quite specific: Kepler instructors own their course materials. However, Kepler “owns” the course descriptions, stated objectives, and equivalency information: in other words, Kepler owns everything about a course which could or does reside in the Catalog and on the website.

But you own the actual content. This means should an instructor resign or be replaced, the new instructor will usually need to prepare new course material (unless they are willing to pay a royalty to the initial instructor and the initial instructor agrees).

As you can see, preparation for a course is not done in a vacuum.

Before Kepler adds a course, a course description, and frequently a list of learning objectives, is produced by either the instructor proposing the course, or the Course Curriculum Review Committee. While educational freedom covers your actual content, it is Kepler's responsibility in general, and the Director of the Certificate Program and the Administrative Council in particular, to oversee courses to make sure that they meet Kepler’s overall program goals and can achieve the stated course objectives.

### General Timeline

Preparation for each course should begin as early as possible. The following general guidelines will be helpful:

Every course has a specific goal in mind for what students will learn and how that learning will be evaluated.

**Three months before** your course is scheduled, make sure to complete the following two steps:

#### **Step 1: The General Overview/Syllabus**

The general overview is the most critical part of course development. It will guide the rest of your decisions. This is where you identify what you want students to learn by taking your course, the path you are taking to get there and how you will determine that students have learned what you want. It also helps your students stay on track.

As noted before, the weekly overview has three primary sections:

1. A general description of what the course covers that includes the purpose for the course. (Why would a student want to take the course? Why is it useful? How does it help them develop their skills? Think about things in a new way?).
2. Your specific goals or objectives for the course. In other words, by the end of the course, what will students know about, have a deeper understanding of, be able to critically analyze and question, can synthesize into a larger understanding, and/or can successfully apply and use?
3. What will students need to do so that you can evaluate whether or not they meet your course objectives.

### **Step 2: The Weekly Overview**

As noted previously, using the general overview, you need to create a weekly overview that outlines the topic for each week, identifies what the student is expected to understand and/or apply, and what activities they need to complete so that you can evaluate their work and provide feedback.

### **Three months to six weeks prior to the start of your course**

#### **Step 3: Begin populating the course website**

The first step in populating the course website is to take your general and weekly overviews and post them to the website. The general overview will go at the top of the course along with any other introductory material you want students to have. There will also be posts that Kepler provides – a general discussion board for student questions, a link to join the live sessions and a link to the recorded course videos.

The weekly overviews will go at the top of each week. Additional course documents, illustrations, etc., should also be included. A discussion board will be present for each week as well. Students are expected to answer weekly study questions and share their ideas with other students using the interactive discussion forum as well as engage in assignments, and perhaps prepare oral presentations.

**If you are team-teaching**, instructors should also make sure to they agree on how the curriculum unfolds over the term and the teaching responsibilities of each member and who will prepare what materials.

### **Six weeks before the term begins**

#### **Step 4: Confirm the required reading list and begin preparing lectures**

The required reading list must be finalized six weeks before the term begins (and no later than one month or students will not be required to purchase the materials you recommend).

Finalizing the reading list and any book(s) that must be purchased includes researching whether or not all of the books are actually in print. This deadline is especially important, because we must provide our readings lists to students as early as possible so they can receive their books on time.

Please note that international students may experience delays of up one month from order date. And, if you specify a book which is available from an international source, domestic students may have the same experience.

You are responsible for ensuring the materials you use respect copyright law. Before the term begins, you should have permission for use of copyrighted materials. This permission can take a significant amount of time. Material under copyright must have a notice on the version provided to



students and be stored specifically in your course so that only registered students have access. See current Intellectual Property Policies on the instructor course site.

### **Written materials and lectures**

You will want to start preparing your additional written materials and presentations as soon as possible. The PowerPoint presentations will probably come last, but it is still best that you wait no longer than six weeks prior to class to begin creating them. Time will pass far more quickly than you think and you will want to get this task completed before the course begins.

\* \* \*

## **Presenting Astrological Material**

### **Considerations for Assuring a Sound Educational Presentation**

Keep the following considerations in mind as you prepare. They are at the heart of Kepler's educational mission of developing fully-rounded and grounded astrological professionals.

Our certificate program combines vocational and academic education:

- Vocational education aims to provide competency in the performance of skills, duties or procedures that apply to a specific occupation, often leading to licensure in that field. Kepler wants students to have solid astrological skills in multiple areas of practice. Kepler also wants its student to understand more than just a specific technique so they can critically compare and evaluate different options.
- In academic education, more must be taught than simply how to do something. The how must be grounded in its historical, philosophical and cultural context, along with comparative and critical analysis of what is being taught. Kepler wants to ensure that our students understand the cross-cultural and/or historical dimension of what they are learning whenever feasible so they can evaluate what they know in a larger context.

Because vocational education stresses competency, its approach to lifelong learning is the acquisition of more techniques, better techniques, or more in-depth knowledge of techniques. Often, this is linked to continuing education mandates that are part of state-sponsored licensing.

Kepler's program is more open-ended because immediate practical application is not the only goal.

How is Kepler's educational approach achieved in practice? The following guidelines and questions can help you present techniques within Kepler's educational setting. If you don't know the answers to these questions or are unsure of where to look, please contact the Director of the Certificate Program. Other of our instructors may have already discovered some of this information. Kepler also has a large astrological library and can assist in finding answers.

- Rigorously define a technique: how is it calculated? What (if any) is its astronomical or temporal basis?
- When and where did it originate? Is there a known author of the technique?
- Provide sources for early usage where possible, and multiple sources for calculation, application and interpretation.
- Is it part of a cluster of other techniques (as, solar arcs and midpoints are typical techniques used by cosmobiologists)?
- Which schools or lineages use the technique? Which reject (or ignore) the technique?
- Did the technique migrate to other cultures or lineages?

- What other techniques are used in place of this technique in other schools?
- What are the philosophical underpinnings of the technique?
- Does the use of this technique have an underlying set of assumptions that would undermine the use of any other technique?
- Has the use of the technique changed over time, or across cultures?
- What are the practical applications and limitations of the technique?
- What controversies surround the use of the technique and in what context?

### **Use of Astrological Charts & Methods**

The purpose of presenting charts in class, like any other component, is to teach, but to teach what? This is a good exercise in distinguishing between vocational and educational approaches. In the early phase of either vocational or educational training, the use of charts is declarative:

to show the components of a chart, the symbols, the aspects. At this stage, the primary purpose of the exercise is to teach the students to identify the how these pieces fit together structurally.

After the student has memorized the vocabulary sufficiently to move on to higher forms of learning, then the use of a chart assumes a different role. The next major stage is functional and/or procedural. Now the chart is used to allow the student to verify that s/he can put together astrological sentences. The student is expected to be able to identify positions, and then be able to extract meaning from them. Repeated use of charts at this point reinforces the application of technique.

In a strictly vocational class, the students' charts are routinely used in both of these two stages: and for good reason. As a hook, the theory is that everyone likes to know about themselves, and so this has both the virtue of popularity, plus there is the added value of immediate feedback from the other person about what an astrological combination means. Furthermore, teachers use this as a way to "prove" the method – hearing feedback from the person that "this is true" provides positive reinforcement to everyone to continue to learn this particular method.

This can work well in an informal and private vocational setting. But this is emphatically not the goal of teaching at Kepler. In order for this procedural knowledge to become subsumed under conditional knowledge – which is our goal – two extra components are necessary. Conditional knowledge in part requires the development of a logic base, but here, the logic base is a little different than how practitioners of astrology might see it. A strictly vocational logic base is aphoristic in construction: "If the Moon is Void of Course..." "If Mercury is retrograde..." Here, the student memorizes a series of conditional statements, and learns how to apply them.

**Educational logic base is more comprehensive.** To use the Void of Course Moon example, here the student needs to know the definition of Void of Course, whether there are variations in that definition, was it defined the same way in different historical periods, is it similar in Hellenistic, Vedic, Arabic, Latin, 17th c. English, or modern astrology? How have different cultures in different time periods interpreted it, and have they used it at all? Should Outer planets be considered? What are the astronomical ramifications of Void of Course Moons? Can the student design an experiment to test the validity of the interpretations? What other techniques are necessary for Void of Course Moons to "work," and what other techniques are then dependent on Void of Course Moons? What does the concept say about definitions of aspects and orbs?

In the core astrological certificate curriculum, declarative, functional and procedural exercises are necessary in order to teach the student about the methods, although critical thinking questions, for example about the transmission and development of methods, and the type of information needed to evaluate or compare different methods must still be included. A student who has completed our core astrological curriculum, should have the tools and critical thinking skills to understand what pieces of information they need to evaluate or attempt to duplicate any new astrological technique they encounter.

No other courses should include a technique that is not examined critically. In particular: No presentation of technique should advocate one point of view.

No presentation of technique should limit the student's choices about variations in technique, unless the exercise is clearly labeled as historical; e.g., an exercise in doing solar returns using the methods of Bonatti.

No presentation of technique may advocate a viewpoint that would be considered controversial within the astrological community without clearly labeling the nature of the controversy, and identifying alternative methods. For example, in a Western astrological presentation, it would not be appropriate to mandate a house system for other than historical reasons, and even there, it should be mentioned that such an approach is arbitrary.

The basic steps to take when teaching astrological methods are to identify:

1. Origin of the method and time period
2. Who uses the method
3. Variations in method
4. Strengths and weaknesses of method
5. Controversy surrounding the method

To the greatest extent possible, we encourage the following:

- Comparative exercises which encourage the students to think, and to make up their own minds Genuine interest in challenging the students to think about issues like consistency and proof Exercises which encourage the students to develop reasoning skills
- Exercises which encourage the students to consider specifics within broader philosophical and historical contexts

A valuable thought experiment to always keep in mind is that Kepler must be a welcome home for a person who is interested in astrology, but agnostic about it. For example, someone who wishes to be a historian of science and who wishes to learn about how astrology works from an insider's perspective should feel just as welcome at Kepler as someone who has passionately studied astrology and done charts for thirty years.

### **Additional help in Designing your Course Syllabus**

Your course syllabus is the document in which you

- define course policies and procedures
- establish course requirements.
- Specify required reading
- detail assessment procedures

The syllabus must be available on the course site, although it may be split into more than one document. Any changes in requirements or deadlines should be announced to the class through a forum post in the “News Forum.” and confirmed through an updated print version of the syllabus or syllabus section.

A course syllabus is the best tool you have for thinking through the organization of your course. By completing this document first, you will save a great deal of time in the future because you have already done the hard work of ensuring that your course flows, that what you are hoping to teach is what students will be learning and that you know how you will be able to evaluate student's learning at the end of the course.

The syllabus will include:

- **The Course Description** (1 to 2 paragraphs). This description will be used in the catalog and on the Kepler website. It provides an overview that should give the student a reason to want to take the course.
- **Course Learning Outcomes** (objectives): Course objectives or outcomes will include the types of learning you want to see from your students and will be evaluating at the end of the course. A subset of outcomes and objectives should be created for each week or session that helps the student achieve the overall course objectives.
- Questions you should to ask yourself as you prepare the goals and outcomes for the course:
  - What do you want students to know about? What concepts should they have some familiarity with?
  - What techniques or methods do you students to have at least some practice in applying?
  - What level of expertise do you want to develop? What techniques should they be at least comfortable with even if not fluent?
  - Where methods/techniques should students be to combine and synthesize into an interpretation?
  - What concepts should they have analyzed, compared or contrasted with other concepts?
  - What potential application or ethical pitfalls or concerns should they know about or have actively engaged in debating?

The next step is to turn these thoughts into a more specific form so that you and the student can measure whether or not what you intended them to learn is what occurred. Here are some examples:

- (Knowledge and Application)
  - “By the end of this course, students will know about the differences between natal charts and transits, solar and other planetary returns, progressions and directions”
  - “By the end of this week, students will understand the principles of solar arc directions and how this type of chart is calculated based on the natal chart”
  - “By the end of this week, students will know how fast planets move in their orbit around the sun compared to their movement in an astrological chart.
- (Critical Thinking)
  - “By the end of this course, students will be able to compare and contrast the various cosmological concepts of Earth-centered and Sun-centered theories in the studied

literature.”

“By the end of this course, students will be able to evaluate what forecasting technique or techniques will be most useful to answer a specific question.”

“By the end of this week, students will be able create an interpretation of a planet in a particular sign and house and incorporate into that interpretation whether the planet is being challenged and/or assisted by other planets in the chart using major aspects.”

- You can also describe what the students will be covering in a more general fashion – either style is fine as long as the students get an idea of what will be expected of them and what you think is important enough that they should be able to do something with the information. Here is an example:

- This week students will examine the astronomy of the planets and compare it to the planet’s astrological symbolism. (Critical Thinking)

- **Prerequisites:** Any expected Prerequisites for the course
- **Contents:** Outline of the course contents (weekly descriptions and outcomes)
- **Assignments**
  - Description of the work expected of each student. Scheduled assignments and due dates.
  - **Reading List:** Required reading and, optionally, recommended reading
- **Grading**
  - Explanation of the grading system (minimal level for Pass, etc.). How will you evaluate whether or not the students have met your course objectives and outcomes, what factors will be included, how they will be weighted, and how they will be translated into grades? How will the student know how they are progressing week-by-week?
  - Lateness of work or Missed Assignments: specify the conditions for accepting late work or not, and inform students if missed assignments may be made up and the procedure for doing so. If extra credit is an option, state what is acceptable and how it is graded.
  - Include any rubrics used for evaluation
- Explanation of how to reach the instructor (“office hours”, phone numbers, e-mail, native time zone)
- Request to be informed of any needs of students with physical or learning disabilities.

\* \* \*

The following items may be essential or useful for some courses:

- Explanation of the individual student's responsibilities in shared or collaborative work and how the individual's contributions are evaluated
- Expectations of student participation in class
- Rules concerning submission of late assignments
- Mechanisms for apprising the student of progress and standing in the course

## **Planning for Major Assignments**

Many courses are designed around the model of weekly Forum discussion questions and a short assignment, with one or two major assignments to demonstrate competency. There is a tendency for almost all instructors to assign a final paper or project, due the last week of class. This can put a burden on both the students and instructors, requiring them to expend a comparatively large amount of time right at the point that the extra time of preparing evaluations is due. Consider ways to break major assignments into parts or space demonstrations of learning throughout the course schedule.

## **Other Factors in Course Preparation**

On the first day of class, having a detailed syllabus is wonderful for the student: she/he can easily see the contours of the course, and the weeks where assignments are heavier.

Online, all these assignments are shown in any case. Our course software, Moodle, is designed to show all material organized by week, so the students can see resources as well as assignments, and this receive a complete picture of how the term runs.

It may seem burdensome to encapsulating these sections into a separate document. However, in the initial set-up phase, compiling all the assignments together may have the advantage of making it easier for you to scan the assignments, and adjust the weekly workloads accordingly. So the best answer may be: the first time you teach a class, the very detailed syllabus may be your best bet, but after the first time, you may want to simplify it somewhat to avoid the possibility of different sets on instructions or criteria.

It's important for any changes made when you teach a course again get incorporated both into the Moodle set-up and the syllabus. It is critical that any changes to description, design or outcomes also be communicated to the Administration in order to update the catalog and the website.

## **Proposing a new course or changing an existing course**

New courses or major changes to current courses must be approved by both instructor and administrators. You may initiate this process by emailing Kepler's President, Vice President of Academics or Director of the Certificate Program (the Administrative Committee). A new course proposal should include a draft of the Overall Course Syllabus as described above. If you are proposing a workshop, this document may be one page. If you are designing an in-depth 10-week certificate course, it will be longer because you also need to include a brief overview of the weekly objectives and learning outcomes.

The Committee will examine the information to make sure all the questions are answered and that the proposed course or course change is appropriate. The Administrative Council will make the final decision, with input from the Administrative Council.

The various committees examine the syllabus and look especially for a description of how the student's work is to be evaluated.

## **Course Scheduling**

The Director of the Certificate Program (DCP) is responsible for determining the frequency of a course offering, and in which term it appears. If you will be unavailable in a particular term to teach, please alert the DCP as soon as possible.

## INTRODUCTION TO BLOOM'S TAXONOMY

Bloom's Taxonomy was the work of Benjamin Bloom, an educational psychologist. His classification system is one of the more popular ones available for use in understanding the depth of learning being required of students. There are multiple websites devoted to this taxonomy, and some are listed below. But the overall idea is the following. There are six levels of learning as designated in this pyramid:

**Knowledge** – and this could be considered procedural knowledge in Bigg's classification – Knowledge is the lowest level of learning. The words used for each step in learning can help you think about what you want from your course and can be used to help you complete student evaluations.



- **Knowledge:** arrange, define, duplicate, label, list, memorize, name, order, recognize, relate, recall, repeat, reproduce state.
- **Comprehension:** classify, describe, discuss, explain, express, identify, indicate, locate, recognize, report, restate, review, select, translate,
- **Application:** apply, choose, demonstrate, dramatize, employ, illustrate, interpret, operate, practice, schedule, sketch, solve, use, write.
- **Analysis:** analyze, appraise, calculate, categorize, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test.

- **Synthesis:** arrange, assemble, collect, compose, construct, create, design, develop, formulate, manage, organize, plan, prepare, propose, set up, write.
- **Evaluation:** appraise, argue, assess, attach, choose compare, defend estimate, judge, predict, rate, core, select, support, value, evaluate.

### What you are trying to accomplish is the following:

Initially, a student needs to show that they understand the material. What are the facts? Can the student explain what they have learned in their own words? Can they apply what they have learned? This is done through the first three levels of Bloom's taxonomy:

- **Knowledge – who, what, when and where:** Define, list, tell, describe, recognize, show, label, examine, tabulate, quote, name. Knowledge represents the lowest level of learning outcomes in the cognitive domain.
- **Comprehension – grasp the meaning in the student's own words:** Discuss, summarize, interpret, explain, associate, distinguish, estimate, differentiate. Comprehension is defined as the ability to grasp the meaning of material.
- **Application – use the information:** Apply, classify, translate, demonstrate, calculate, complete, illustrate, show, solve, modify, relate, change, classify, experiment, discover,

debate. Application refers to the ability to use learned material in new and concrete situations.

In order for the student to successfully incorporate and consider new information, you want the student to show that they can think critically about the material. How does the student structure their argument? What are the boundaries of what s/he is examining? What is their conclusion? Can the student justify their conclusion or hypothesis?

Critical thinking is used when you organize your ideas to show patterns and meaning, resolve conflicts between differing views, recognize and relate to different value systems both found within the material and between the material and your own values, and make judgments about what you have learned. These are components of levels four through six in Bloom's taxonomy:

- **Analysis – identify components and find patterns.** Analysis refers to the ability to break down material into its component parts so that its organizational structure may be understood. The student should be able to identify the motives, reasons, and/or causes, reach a conclusion based on evidence, inference, or generalization, specify what is being examined and what is not. Key words: Analyze, separate, order, explain, connect, classify, arrange, divide, select, explain, infer, distinguish, differentiate, compare and contrast, organize.
- **Synthesis –creative use of old ideas to create new ones.** Synthesis refers to the ability to put parts together to form a new whole. The student should be able to generalize from individual facts to identify commonalities, identify meta-patterns, relate knowledge from different areas, make predictions or solve problems. Key words: Predict, combine, integrate, modify, plan, propose, assess, rearrange, substitute, create, design, invent, compose, formulate, prepare, generalize, rewrite produce, design, develop, synthesize, construct, how can we ..., what if...
- **Evaluation – compare and discriminate between.** Evaluation is concerned with the ability to judge the value of material for a given purpose. The student should be able to make a value judgment about the material, offer an opinion; recognize subjectivity and underlying assumptions. Key words: Assess, decide, rank, measure, recommend, convince, select, judge, explain, discriminate, support, conclude, compare, summarize, evaluate.