

Senior project: Research Experience in Animal Science
Incorporation of equine assisted therapy in university curriculum

S. Y. Sabati
California Polytechnic State University San Luis Obispo
Animal Science Department

Executive Summary

Equine-assisted activity and therapy incorporates physical, mental and language treatments through equine movement to remediate medical conditions or impairments in clients. For all the opportunities that equine-assisted therapy provides there is little education on the practice. The focus of this project is to present the process, benefits and limitations of adopting an equine-assisted therapy course at California Polytechnic State University so it may be used as a reference for future course proposal.

Objective: The aim of this proposal is to offer insight into Equine-assisted therapy, understanding how to integrate the Professional Association of Therapeutic Horsemanship (PATH) International curriculum into the university and interpret the process of creating an equine-assisted therapy course at California Polytechnic State University. PATH International provides three levels of membership for higher learning institutions that allow for the education and certification of therapeutic riding. Cal Poly must complete a course proposal, apply for Level I PATH membership and create a course based on equine-assisted therapy.

Three aspects of this proposal pose a challenge for the university: appointing a faculty member to teach the course or hiring a specialist; ensuring that a sufficient number of students are interested in taking the course; and determining if the course would be a worthwhile investment for the university.

Although there are challenges, they are minimal and the addition of a Level I PATH course at Cal Poly would not only benefit the students but also attract additional attention to the university. Equine-Assisted Therapy is an ideal candidate for a Cal Poly course because it encompasses the true modus operandi of the university - "learn by doing."

Introduction

For over six thousand years there has been a long-standing relationship between humans and horses (*Equus caballus*). Even in this progressive technological era with alternative treatment options and advancing medical practices there is a limited understanding of the significance in the human-animal relationship. Hippotherapy is a physical, occupational, and speech-language therapy treatment that utilizes equine movement as part of an integrated intervention program to achieve functional outcomes (American Hippotherapy Association, 2010). Equine facilitated therapy serves as a treatment base for various conditions involving postural, motor, neural and sensory systems by utilizing the interaction of the horse, rider and instructors (Granados, 2011). This multifaceted discipline emphasizes the vital role horses have in human lives and how its application is broader than it appears. California Polytechnic State University is an institution that specializes in the Animal Sciences and should, in turn, be fully aware of the significance of the human-horse connection. Applying the subject of animal therapy would attest to the university's philosophy of "learn by doing." Therefore, the purpose of this project is to draft a potential plan that will integrate equine-assisted education and PATH International certification into Cal Poly curricula.

The term 'hippo' is derived from the Greek word meaning horse. Hippocrates, an ancient Greek physician, had documented horseback riding in 460-377 B.C. as an exercise and believed it to be beneficial for the rider (American Hippotherapy Association, 2010). Accounts of horseback riding having beneficial physical effects were also taken in the late fifteenth and seventeenth century through out Europe. In the more recent past, polio survivor Liz Hartel, won silver medal in a Grand Prix dressage event at the Helsinki Olympics in 1952. She advocated horseback riding as the cure for her disease. It was in the United States that

the first organization of therapeutic horseback riding was established. The Professional Association of Therapeutic Horsemanship International (PATH), formerly known as the North American Riding for the Handicapped Association (NARHA), was founded in 1969 and located in Denver, Colorado (PATH Intl., 2014).

PATH International provides three levels of membership for higher learning institutions that allow for education and certification of therapeutic riding. The process begins with course development and approval by the Academic Senate Curriculum Committee. After approval, the university should substantiate the course by becoming accredited with the Professional Association of Therapeutic Horsemanship International (PATH). To do so a relationship must be established between the university and the organization via membership. PATH Intl. issues three levels of membership to colleges and universities: Level I - Fee of \$650.00 (annually) and institution is certified to teach curriculum for Equine-Assisted Therapy but does not offer certification to students, Level II - Fee of \$775 + \$250/student (annually) and institution offers curriculum and certification at an external accredited center, and Level III - Fee of \$1,000 + incremental cost per student and curriculum, student certification and accreditation as a center (Fees subject to change within the next year). It is important to make clear the terminology for operating a program like this (See Appendix A). It would be in the best interest of the department overseeing the proposed course to initiate the correspondence with PATH by investing in the Level I Higher Education Membership.

The PATH organization is the forerunner in equine-assisted therapies and has over 800 member centers with more than 7,000 members worldwide. Obtaining a PATH certification is currently considered a requirement in most therapeutic establishments for them to be deemed credible.

Purpose

The typical services that a therapeutic center would provide include Hippotherapy and/or Adaptive Riding. Hippotherapy is focused on applying equine movement as a medical treatment for physical, occupational and speech related conditions (The National Center for Equine Facilitated Therapy, 2014). In contrast, adaptive riding highlights the positive contributions of horsemanship on and off the horse. The intention is to hone in on the cognitive, emotional and physical welfare of special needs individuals (NCEFT, 2014). An additional service includes veterans programs that cater to active military members or injured veterans with conditions such as physical neural or limbic injuries, amputations or post-traumatic stress disorder. Horses are an advantageous alternative to traditional therapy practices. The human-horse relationship plays a crucial role in patient improvement. According to the Equine Assisted Growth and Learning Association (2010), the social nature of horses, physicality of working with them and the motor stimulation by horse movement has a powerful influence on the client.

Riding Sessions

A therapy team will usually consist of the certified instructor, a leader for the horse and one to two side-walkers to stabilize and assist the rider. The amount of assistance before, after and during the ride depends on the comfort ability of the rider and the severity of the rider's condition.

Typically, a riding session has three main phases: mounting the horse, the lesson and dismounting. The steps seem rather elementary, but they demand the utmost attention and focus on the rider to achieve a successful session. Because the riders will generally be disabled or mentally impaired, they could be fearful or uncomfortable when interacting closely

with a large animal. It is crucial for all members of the team to create a relaxing, calm and enjoyable experience for the client. All team members must maintain professionalism.

(American Hippotherapy Association, 2010)

Supporting Studies

Overall, hippotherapy or equine-assisted psychotherapy as a treatment strategy has yielded positive results in children and adults with medical conditions, impairments/disorders, or emotional trauma. Varying conditions such as patients recovering from stroke (Beinotti et al., 2013), cerebral palsy, spina bifida (Ihara et al., 2011), autism, learning disabilities and other debilitating or otherwise physical dysfunctions have demonstrated improvement with therapeutic riding. The gait of a horse resembles the motions of walking for the rider (Asselin et al., 2012) and therefore strengthens the muscles to an extent in the trunk of the body, improves motor, neural, sensory and postural systems, and engages balance (American Hippotherapy Association, 2010). This attunes bodily responses to the concurrent stimuli from the session. The cognitive and social effects of therapeutic riding are also apparent in clients with behavioral disorders such as autism. Riders are shown to have decreased stereotypical behavior and improved social interaction (Ward et al., 2013). Additionally, therapeutic riding is utilized as 'psychotherapy' when clients experience behavioral problems, troubled home lives or are deemed at-risk (Bachi et al., 2011). The self-esteem, trust and life satisfaction are markedly improved in many individuals that decide to continue therapeutic riding for an extended period of time.

The wide array of disciplines that comprise equine-assisted therapy makes it an ideal subject to introduce to Cal Poly San Luis Obispo. It will broaden the curricula base across

several departments and increase university interconnectedness. This will expose students to each other and establish a better community at Cal Poly.

Procedures and Requirements

Course Development

The first course of action for offering an equine-assisted therapy course is to complete a Course Proposal form, which will include the number of potential students who would be interested in a class or program for Equine-Assisted Therapy. The Course Proposal spells out the intentions, content and objectives of the course and must go through the proper channels in the curricular review process. Once approval has been verified, the proposal then is reviewed a final time by the Academic Senate Curriculum Committee.

Once approved, the course would include the educational objectives set forth by PATH International, which would result in the university being a Level I Higher Education member of PATH Intl. The university must adhere to the PATH curriculum requirements, pay the annual membership fee, utilize all necessary materials purchased for the Equine-Assisted Therapy course and have the course instructor attend the PATH Intl. conference (PATH International, 2014). The typical curriculum is spelled out in the Appendix.

Membership Criteria

A Level I Higher Education Membership is for institutions that provide curriculum for the equine-assisted activities and therapies. Level I membership does not include PATH instructor certification for university students. The university is not obligated to refer to a Premiere Accredited Center (PATH certified riding facility) nor is it obligated to serve as a Center The PATH Level I Membership has an annual \$650.00 fee that includes: 1) Three issues of PATH Intl. *Strides* subscriptions annually 2) University inclusion on the online directory for PATH Intl.

3) and one PATH Intl. Conference registration fee underwritten by PATH Intl. for one faculty member.

Application Process

The university must submit the PATH International application packet and retain copies of all materials to serve as reinforcement for any possible errors. The application packet includes:

- 1) Application form
- 2) Specified membership level
- 3) Memorandum of Understanding between the university and an accredited riding center (if applicable)
- 4) Faculty list with C.V.s
- 5) List stating where PATH Intl. Certified Instructor Criteria is incorporated in curriculum with course name/code
- 6) Completed student enrollment list

(See Appendix A and D)

Membership Cancellation

If the course is no longer offered then there is no necessity for the PATH membership and the university may cancel said membership. If, for any reason, an institution/center elects to cancel their membership, PATH Intl must receive written notice of cancellation. The membership fee will not be refunded and the membership as well as all benefits will be cancelled entirely. The university may re-apply at any time with the condition that the current application fee must be paid again. (PATH International, 2014)

Recommended Courses and Departments

A specific curriculum would be assigned to the university for Level I Membership. That material includes what courses are required for a complete program. The PATH recommended courses include equine sciences, psychology, education and business. The most relevant university departments offering a therapeutic riding course would be Animal Science, Special Education, Kinesiology or Psychology (See Appendix D).

Instructors and Faculty

Ideally, this course will be taught by an instructor who has knowledge of horses and is also familiar with the client aspects such as different types of afflictions and therapies. It may be beneficial to include an assisting lab instructor with a background in equine science and management to facilitate in lab work. It is to the university's discretion if they choose a current faculty member or hire a new member specializing in Equine-Assisted Therapy. The most feasible option for Cal Poly is most likely to hire another staff member for the Animal Science department due to the infrastructure that is currently in place. The other option is to acquire a lecturer from another relevant department such as Kinesiology or Special Education. According to the PATH International Higher Membership Team the instructor for an equine-assisted therapy course is not required to be PATH certified with extensive experience with therapeutic riding.

Liability and Facility Use

The PATH Level I Membership for Cal Poly allows for a more basic method of integration with less concern for risk and liability. Many departments, particularly Animal Science, are aware of the risk management protocols. As with many of the Animal Science enterprises and species classes, the student population that elects to take the course will be required to sign a waiver of liability and give emergency contact information. A workshop or

brief training on appropriate skills, behavior, and dress will be provided to students who are enrolled in the class. The purpose of the training is to give students an understanding of persons with special needs and prepare them for work with large animals. To have a certified equine-assisted therapy course taught at this university the process would be much simpler in terms of how little non-students associated with Cal Poly will be involved. Interactions with horses and special needs individuals would come in the form of potential labs and required hours at off-campus centers to gain therapeutic horsemanship experience.

Discussion

Benefits

This proposal is predominantly conceptual. The hypothetical predicted outcome is the eventual offering of equine-assisted therapy education and incorporation of therapeutic horsemanship. The potential benefits of an equine-assisted therapy course extend to students, faculty, various departments and the university as a whole. For students, the main priority is to expose as many potential career options as possible to help in career selection. Students can determine alternate career paths within the equine industry as well as therapeutic careers with people (PATH, 2014). The addition of equine-assisted therapy would allow students within majors and across departments to have the opportunity to integrate disciplines rather than deciding between one or the other. Including animal-assisted therapy in the curriculum would expand the Animal Science department across the university to work with human therapy, psychology, business and education. The expansion would bring attention and support to the department as a whole within the university and in the surrounding communities (particularly the special needs advocates and programs). The increased recognition of the PATH

accreditation at Cal Poly this may pique the interest of prospective students or prospective donors.

Challenges

The limiting factors of offering a therapeutic horsemanship course are minimal. However, there are three aspects of this proposal that would appear challenging: appointing a faculty member to teach the course or hiring a specialist; ensuring that a sufficient number of students are interested in taking the course; and determining if the course would be a worthwhile investment for the university.

Conclusion

Overall, choosing Level I Membership with PATH Intl. would enable students to explore the study of equine-assisted therapies with the least amount of cost and little to no risk in terms of liability for non-students riders/clients. Level I is the simplest level of membership and could be expanded if there is greater interest in the future. This membership would segue Cal Poly into a more advanced program over time and create a relationship with therapeutic organizations.

Equine-assisted and therapies are an effective alternative to the more conventional treatments that may not prove beneficial to particular patients. Equine-assisted therapy, which allows for enhanced treatment in individuals, gives university students sufficient opportunities to discover new career options. This type of therapy is very practical and the rider is engaged by the physical interactions of the horse and the instructors. The benefit of animal-assisted therapies, in general, is not based on implications and is supported by medical studies. The addition of a Level I PATH course at Cal Poly would not only benefit the students but also attract additional attention to the university. Equine-Assisted Therapy is an ideal candidate for

a Cal Poly course because it encompasses the true modus operandi of the university - “learn by doing.”

Acknowledgements

The author thanks and acknowledges the guidance of Dr. Mark Edwards, PhD. for the approval, support and evaluation of this proposal. Thank you to Dr. Marc Horney for supporting information on university course proposals and Katherine O’Clair for critique and assistance on manuscript drafts. Additionally acknowledgment is due to Cal Poly Special Education Coordinator, Michael Ruef, and Risk Manager, David Carroll who have also contributed to the production of this proposal.

References

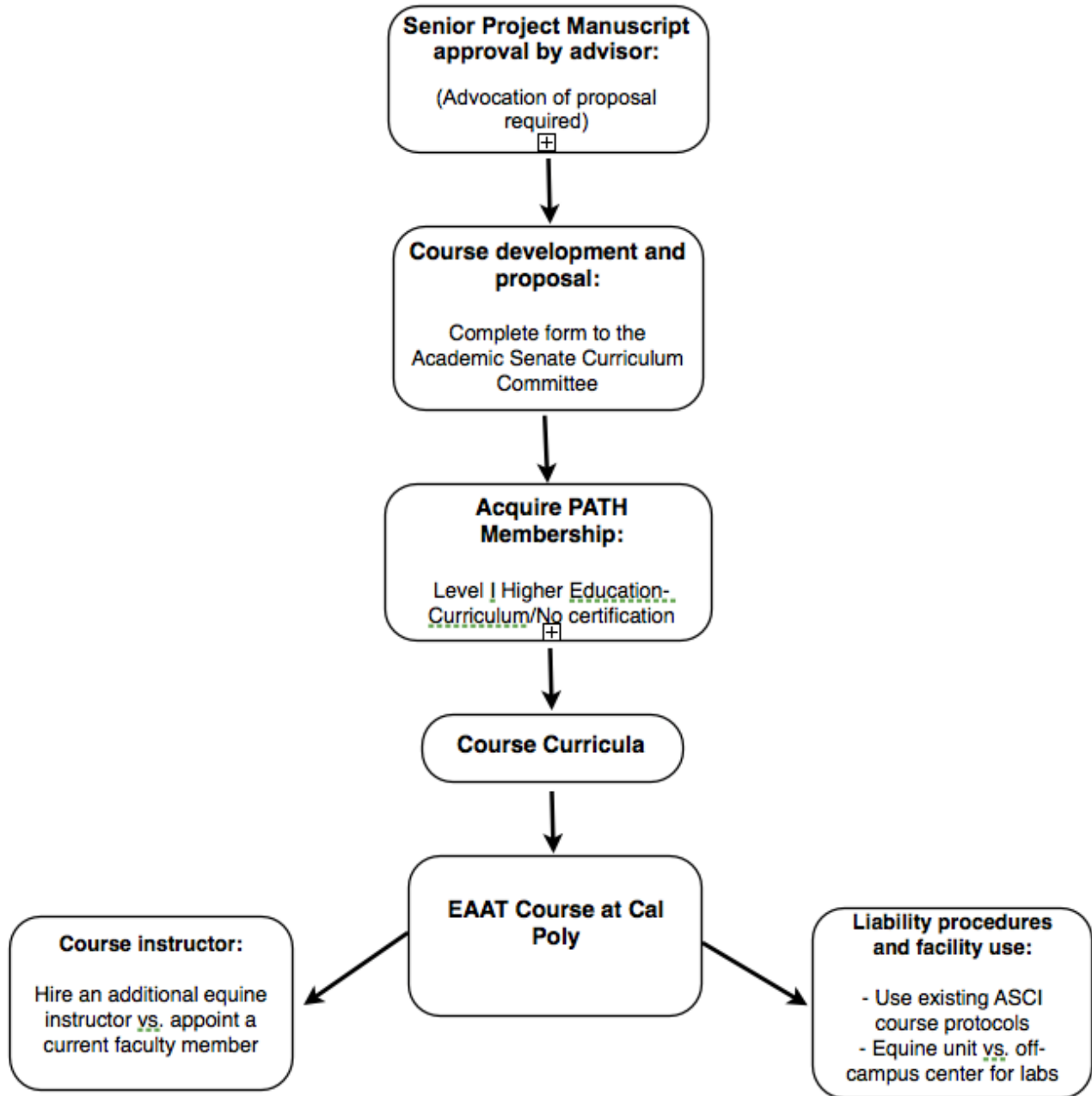
- The American Hippotherapy Association. 2010. Hippotherapy as a treatment strategy. <http://www.americanhippotherapyassociation.org> Accessed May 1, 2014.
- Agalos, P. 2012. Animal science 22: equine science lecture. California Polytechnic State University.
- Asselin, G., C. Ward, J. H. Penning, S. Ramanujam, and R. Neri. 2012. Therapeutic horseback riding of a spinal cord injured veteran: a case study. *Rehabil. Nurs.* 37:270-276.
- Bachi, K., J. Terkel, and M. Teichman. 2011. Equine-facilitated psychotherapy for at-risk adolescents: the influence on self-image, self-control and trust. *Clin. Child. Psychol. Psychiatry.* doi. 10.1177/1359104511404177.
- Beinotti, F., G. Christofolletti, N. Correia, and G. Borges. 2013. Effects of horseback riding therapy on quality of life in patients post stroke. *Top. Stroke. Rehabil.* 20:226-232.
- Borges de Araújo, T., R. J. Oliveira, W. R. Martins, M. Pereira, F. Copetti, and M. P. Safons. 2013. Effects of hippotherapy on mobility, strength and balance in elderly. *Arch. Gerontol. Geriatr.* 56:478-481.
- Doessenbach, M., and H. D. Dossenbach. 1983. *The noble horse*. G.K. Hall, Boston, MA.
- Equine Assisted Growth and Learning Association. 2010. <http://www.eagala.org> Accessed May 1, 2014.
- Fazio, E., P. Medica, C. Cravana, and A. Ferlazzo. 2013. Hypothalamic-pituitary-adrenal axis responses of horses to therapeutic riding program: effects of different riders. *Physiol. Behav.* 118:138-143.
- Granados, A. C., and I. F. Agís. 2011. Why children with special needs feel better with hippotherapy sessions: a conceptual review. *J. Altern. Complement. Med.* doi. 10.1089/acm.2009.0229.
- Ihara, M., M. Ihara, and M. Doumura. 2011. Effect of therapeutic riding on functional scoliosis as observed by roentgenography. *Pediatr. Int.* doi. 10.1111/j.1442-200X.2011.03456.x.
- Masini, A. 2010. Equine-assisted psychotherapy in clinical practice. *J. Psychosoc. Nurs. Ment. Health. Serv.* 48:30-34.
- The National Center for Equine Facilitated Therapy. 2014. Programs and services. <http://nceft.org/our-services/> Accessed May 1, 2014.
- The Professional Association for Therapeutic Horsemanship International. 2014. Resources and educational opportunities. <http://www.pathintl.org/resources-education/resources> Accessed May 1, 2014.
- Ward, S. C., K. Whalon, K. Rusnak, K. Wendell, and N. Paschall. 2013. The association between therapeutic horseback riding and the social communication and sensory reactions of children with autism. *J. Autism. Dev. Disord.* 43:2190-2198.

Appendix A

Terminology:

- *EAAT* - Equine-assisted activities and therapy
- PATH Intl. - Professional Association of Therapeutic Horsemanship International
- *PATH Certification* - the certification of individual students, enrolled in the equine-assisted therapy course, to become a PATH instructor.
- *PATH Membership* - having sufficient requirements to meet either one of the three levels of membership that affiliate educational institutions with PATH International. Each level has curriculum and the more advanced levels include student certification.
- *PATH Premiere Accredited Center (accreditation)* - an institution that is approved by PATH International to administer equine-assisted therapy and host clients. Accreditation implies that the institution is a full time therapy facility or a university that has obtained a Level III PATH membership.
- *Memorandum of Understanding* - The Higher Education Memorandum of Understanding is an agreement between the PATH Intl. Center and the university. This agreement represents the interest in and support of therapeutic riding at the highest level. With the signing of this agreement, both parties are agreeing to work together to provide a high level of educational experiences for the institutions students (PATH, 2014).

Appendix B



Appendix C

Membership Levels	Level I	Level II	Level III
Description	For institutions that provide EAAT curriculum but do not offer PATH certification for students.	For institutions providing curriculum that meets criteria to prepare students for PATH certification; but certification is completed at another center.	For institutions providing curriculum that meets criteria to prepare students for PATH certification including the certification itself.
Annual Dues (All subject to change within the next year)	\$650	\$775.00 + \$250.00/student	\$1000.00 + per student rate based on how many enrolled*
Subscriptions to <i>Strides</i>	YES	YES	YES
Listing on Path Website	YES	YES	YES
PATH Intl. Memberships for all students		YES	YES
PATH instructor training manuals, texts, and CD's for each student		YES	YES
Access to PATH online courses for each student		YES	YES
PATH onsite workshop instructor, driving, or vaulting PowerPoint presentation		YES	YES
PATH Intl. Standards for Certification and Accreditation for institution text (1)		YES	YES
Use of distinctive marketing material/logo for institution and partnering center		YES	YES
Full registration to PATH Intl. National Conference (1)	YES	YES	YES
Resource support from Membership Oversight Committee Regional Representative			YES
PATH onsite workshop certification fees waived for participating students			YES

* Level III Rates based on number of student enrollment:

5-10: \$375/student 10-20: \$325/student 20-30: \$275/student 30-40: \$250/student

Appendix D

Recommended PATH Curricula

Equine Courses

- Historical Perspectives: Exploring the Horse-Human Relationship through the Ages
- Foundations of Equine Assisted Activities & Therapies
- Introduction to Equine Facilitated or Assisted Therapy Methods
- Introduction to Equine Facilitated or Assisted Learning Methods
- Introduction to Therapeutic Riding Methods
- Equine Science: Basic Barn Management & Care
- Equine Science: Nature of Horses
- Horsemanship I
- Horsemanship II
- PATH Intl. Certification Course Part I
- PATH Intl. Certification Course Part II

Non-Equine Courses

- Introduction to Psychology
- Introduction to Disabilities
- Learning & Cognition
- Counseling Skills
- Communication Skills
- Research Methods
- Business Management
- Non-Profit Business Management
- Introduction to Art Therapy or Experiential Therapy

Possible Courses and/or Departments

Possible college departments through which courses could be offered at the undergraduate level:

- Equestrian studies, equine science, equine management
- Business/Agribusiness
- Special Education
- Psychology
- Rehabilitation Counseling
- Disability Studies
- Health Sciences (anatomy, occupational therapy, physical therapy)
- Speech Language Pathology
- Recreation Therapy
- Exercise Physiology

Types of courses or suggestions for courses that meet PATH Intl. certification needs:

- Equine Courses
- Equine Science
- Safety and Handling/Understanding the horse
- Equine Psychology/Behavior/Communication

- Training/Natural Horsemanship/Theories of Training
- Equine & Stable Management (history, breeds, care, diseases, tack, etc.)
- Facility Design and Development
- Equitation (several skill levels)
- Historical Perspectives of the Horse-Human Relationship
- Animal Behavior

Psychology Courses

- Counseling Skills
- Introduction to Psychology
- Child & Adolescent Psychology
- Crisis Intervention/Management
- Behavior Modification
- Applied Behavior Analysis
-

Teaching Courses

- Teaching Methods for Riding
- Teaching Methods for Therapeutic Riding
- Educational Psychology
- Learning & Cognition
- Small Group Communication

Business

- Enterprise Operation and Law
- Entrepreneurship (writing a business plan, marketing, etc.)
- Non-profit management

(PATH, 2014)