





2nd July - 20th August 2017



HOME

The Complete Six Week Online Course in designing, managing and maintaining your own Aquaponics System. www.aquaponicsdesigncourse.com

Welcome to the Aquaponics Course

Welcome to the Aquaponics Design Course. This course is one of a kind, being taught by Murray Hallam, a veteran in the Aquaponics industry. Murray has been building, researching and teaching Aquaponics for over 10 years. He has taught Aquaponics to hundreds of students all over the world and is regarded as a premier teacher. His Aquaponics Master Classes are much in demand.

We invite you to join this 6 week Online course and benefit from Murray's years of experience and research in developing Aquaponics systems that really work.

From the comfort of your lounge room at a time convenient to you, the course will roll out over successive weeks, 6 modules of video lessons. You can start watching as soon as you enroll. Join classmates in discussing lessons and Murray will be on hand to answer all your questions. If you have been watching the free videos on murrayhallam.com you will know what an effective teacher Murray is.

Murray's mission is for students to not just study Aquaponics but to act on their knowledge. Many students have taken the course and gone on to great success. Some have secured the health of their family others have prosperous new businesses.

Growing pure food, and growing food locally is Murray's passion and he hopes it is yours too. We invite you to take this learning journey together and become part of Murray's world wide Aquaponics family.

Registration opens 2nd July 2017 for 1 week only with limited places. course runs from 2nd July- 20th August 2017

The Magic starts with You!



I'm a complete beginner. Is this course for me?

The Aquaponics Design Course caters for all skill levels. From an absolute beginner to someone who has been operating their own system for a while and are ready to scale up.

Murray has had people enroll who had just discovered Aquaponics and then wanted to develop a large commercial system. His 4-day Master Class course allowed many students to have the skill-set and confidence to head in that direction.

People of all ages have taken Murray's courses successfully. Schools are developing Aquaponics as part of their curriculum. Some mid-career people see it as an opportunity to start a new business and some people just want to learn how to grow their own healthy fish and vegetables easily.

No prerequisite qualifications are necessary. You will be taken through a progression of learning from the basics, right through to advanced training.

Course Requirements

A broadband Internet connection for video streaming is essential. The videos are not available for download. However, the beauty of Online training is that you can watch the videos repeatedly.

You will need about 3 hours per week to participate in the lessons, but that is anytime you choose, day or night.

The course can be watched on your desktop, tablet or mobile device.

The other essential component is enthusiasm and a willingness to learn!

The course is presented using VIMEO*. If you can watch vimeo on your browser, you can watch and participate in the course.

*Some countries such as Indonesia have blocked Vimeo. Please check the link to see if you can watch vimeo formatted videos. <u>https://vimeo.com/home</u>



Need Help? Have a Question? Contact Support at: support@aquaponicsdesigncourse.net



Thank you, Murray and Lee, for the great learning journey. It has been an amazing learning for me. It really leaves me thinking how I could do more for healthy eating and how I could share the knowledge with people around me. - Seok Ngo Ang

The Many Benefits Of Aquaponics



small spaces

no weeds

no synthetic chemicals

natural fertilisers

I want to run a small farm system and sell to my community



Aquaponics is an ideal system to fill the demand of growing numbers of consumers who want pure, fresh locally grown food. Food miles can be few and a diverse number of products can be grown.

Chefs are continually on the look-out for niche ingredients and seasonal produce with exceptional quality. Forming a relationship with local restaurateurs is something Aquaponic entrepreneurs are doing successfully.

Farmers' markets are booming and offer producers the chance to benefit from higher profits, by removing the middleman and selling food directly to consumers.

The rising interest in organic food and its health, ethical and environmental benefits, has added to the popularity of farmers' markets.

Aquaponics farming avoids pesticides and synthetic fertilizers and attracts higher prices for produce.

People want to know where their food comes from and connect with the grower. Box systems or CSA's where people subscribe to weekly deliveries of produce is another way Aquaponics growers market into their communities.

Designing a Commercial Aquaponics System

Aquaponics is scalable. You can start off with a small farm system and scale up as resources and markets develop.

There is a marked difference in operating a system for profit as opposed to a home system, in terms of productivity and efficiency. When you are making a living, decisions are crucial. Murray will show you how to streamline your operation and calculate ratios and timings for optimum performance.

If you want to start a business using Aquaponics, Murray knows it doesn't start at the build. There are many factors to consider which he will outline and provide you in the course. You will receive the tools to make informed decisions about your business.

Murray will explain in depth the components and functions in his model for Commercial Aquaponics systems, which have been built in various configurations throughout the world. Graphics and animations allow you to see exactly how they work. Interviews with students who are successful in business will give you an insight into what is possible.

This course will teach you how to build a system for your situation which will reap you rewards.





4 Aquaponics DIY Projects to get you started!



To get you started Murray will show you how to build *4-different home systems*. We have step by step instructions. You will learn what is required and exactly how to do it. Even if you've never held a hammer or operated a saw, Murray has designed a small aquaponics system that you can build anywhere in the world based on commonly accessible material. Why not start building one during the course and jump straight into it? Build your home system or make it a training system before you go on to bigger things.



Weekly Course PDF

At the beginning of each week, you will be given a chapter of notes you can download for each class module. These, you can print and compile into a handbook as a permanent reference.

You can also take the lists of requirements to the hardware shop, utilize the record sheets and have the facts at your fingertips. They will be a great support to your learning and you can add your own notes to them.

Indy 11.5 Plan Set Free! Build your Dream System



The Indy 11.5 plan set is a popular plan for a large home system which contains all the elements of the bigger systems. Murray usually sells this plan for \$197 and is giving it to his students for free.

Build this robust and productive aquaponic system using this comprehensive plan set.

The Plan Set contains 16 full-colour A3 pages, plus over 40 pages of A4 building instructions, including a complete list of materials required.

Two different lay-outs are covered in the Plan Set - one with grow-beds side-by-side, for a wider space configuration, and another with beds in a straight line, for a longer, narrower spaces, such as down the side of a house.

This plan has all the elements of a commercial system and can be used as a basis for many larger designs.



BONUS DVDS

7 Day Money Back Guarantee!



As a special bonus for being part of this course, you get free access to Murray's top 3 DVDs in streaming format. *Aquaponics Made Easy* explains the basics, *Aquaponics Secrets* takes you to the next level and *DIY Aquaponics* teaches you how to make a kit system. These videos are yours to enjoy, just for signing up to the course. Valued at AU\$120. Aquaponics has never been this much fun!

Lesson Questions

Just like in a classroom, you are encouraged to ask questions after viewing each video lesson, so you can quickly build your knowledge base.

Each video varies from 5 min to 20 mins in duration. There are no boring white-board discussions in Murray's course. Each lesson is illustrated with video, animation or graphics to illustrate core concepts.

You are encouraged to ask as many questions as you like beneath each lesson. Murray will be on hand to clarify any aspect of the course.

You can post your suggestions or comments below each video and read other student responses as well.

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We are so confident that you will be delighted with Murray Hallam's **Online Aquaponics Design Course** that we will offer you a full *7 day money back guarantee* if you find the course is not for you. Just email a support ticket advising our staff and we will refund you the full price. You get a full 100% refund with no questions asked. How good is that? *You have nothing to lose!*

Weekly Conference Calls! Go ahead - ask your questions!



Enjoy weekly live calls with Murray Hallam. **Murray will be on hand to answer your class questions** in a live webinar and guide you over any design tips you need to know.

You'll be advised in our weekly newsletter the exact time the webinar will be held and if you miss out - don't worry, you'll still be able to gain access and watch a recorded version later at your convenience.

An excellent course. Dense and comprehensive, but delivered in an engaging and accessible way. Very good value! - Craig Thorburn

Course Curriculum

6 WEEKS OF STREAMING VIDEO LESSONS ENGAGEMENT - APPROX 3 HRS PER WEEK

The course material will be available for 6 months from the commencement date of the course.

*Please note the first week is enrollment week. The course is available as soon as you enroll, so Week One will be available for two weeks.

Week One

- Aquaponics from Murray's Perspective
- Aquaponics- the Basics
- History of Aquaponics
- Cycling the System
- System Components
- DWC
- Media Beds
- NFT
- Water Flow Loops
- Keep it Simple
- AusyFish Interview
- Build a Bath Tub System Instructions

Week Two

- Hydroponics V Aquaponics
- Decoupled Systems
- Parameters
- Water Testing
- pH Test Kits
- Why Does pH Trend Down
- Additives for Adjusting pH
- Water Source
- Autosiphons
- Calculating Flow Rates
- Aeration and Filtration
- When To Add a Filter
- Dissolved Oxygen
- Back Up Systems
- Vertical Growing
- How to Build GroPocket Towers

Week Three

- Plumbing Components
- Reusing Plumbing Fittings
- What is FloMedia ?
- FloMedia Walk Through
- FloMedia Water Flow Gravity
- FloMedia Timber Bed Construction
- Folding the Liner
- FloMedia Drilling Holes
- FloMedia Floating Rafts
- FloMedia Polystyrene
- FloMedia Maintenance
- FloMedia Pest Control
- FloMedia Seed Saving
- FloMedia Conclusion
- Raising the Grow Beds
- Pine Combo Kit Build A
- Pine Combo Kit Build B
- Pine Combo Kit Build C
- Pine Combo Kit Build D Fish Tank
- Hoop Greenhouses
- Building on a Slope Intro
- Building on a Slope Case Study
- Building on a Slope Summary
- AusyFish Netting and Sizing

Week Four

- Introduction to the Indy System
- Indy 11.5 System Plans
- Indy The Sumps
- Indy Water Flow
- Indy Mineralisation
- Settlement Tanks
- Radial Flow Filter
- Building a Wicking Bed
- Introduction to the Twindy

- Twindy Owner Interview
- Fixing Nutrient Deficiencies
- Growing Seedlings
- Acclimatising Seed
- Plant Nutrient Deficiency -Blossom End Rot
- An Example of Pythium
- What to Feed your Fish
- Calming Fish with Cloves
- What to Feed Your Fish Alternatives
- Ausyfish Raring Fish in Ponds
- Ausyfish Packing Fish for Sale

Week Five

- UVI System Explained
- Commercial Farm Tour in Hong Kong
- Commercial- Running A Hybrid System
- Commercial Aeration System
- Commercial Aquaponics Solving Problems
- Plant Nutrients 1
- Plant Nutrients 2
- Plant Nutrients 3
- Introduction to Pest Management
- Pest Management 2
- Pest Management 3
- Interview With A Commercial Designer
- Interview with Leon Yeo
- Commercial Aquaponics Mega Farms
- Case Study Pedros Farm

Certification



Week Six

- Commercial Filters
- 1. Pumps Water
- 2.Pumps Solar
- 3. Pumps Fail Points in 24V pumps
- Solar The Battery Bank
- Horticultural Lighting
- Fish Stocking Densities
- Commercial Nutrient Density 1
- Commercial Nutrient Density 2
- Commercial Aquaponics Farm Owner Interview
- How Big Should My Farm Be?
- Case Study Videos Manna Farms Korea
- Designing for Profit
- Business Plan Tool Simple
- Business Plan Detailed
- Mind Mapping
- Design Exercise Submission

Assessment

When the course is completed and if you wish to be certified, you will be required to submit Online, a design for an Aquaponics system. Murray will explain all the requirements in Week 6 of the course. By then you should feel very confident you can tackle any project big or small.

You will be required to submit a design with supporting documentation. We want you to demonstrate that you have a full understanding of what is required to build a fully functional and profitable system.

You will have 30 days after the course has finished to complete and submit your design by 20th Sept 2017.

If your submission is successful and you have completed the course requirements, you will be awarded an Aquaponics Design Certificate. Each certificate is signed and dated by Murray Hallam and will be awarded by the Aquaponics Institute of Australia.

The original certificate will be posted to your address any where in the world.

Course Graduates



Leon Yeo, who has completed Murray Hallam's Aquaponics course now has gone on to design and build three large commercial aquaponic farms in mainland China, Hong Kong and Taiwan.

These are large installations, with the Chinese greenhouse currently being built, is a massive one hectare plant. The other greenhouse in Hong Kong is smaller at about 2,200 square meters.

Leon as the CEO handles the marketing and operations of all facilities. Leon says the organic market is two or three times the price of conventional food so people see opportunity. "Supply always lags demand." "A lot of people are demanding organic food but right now the supply is not getting there. One of the reasons if that a lot of people are using conventional organic cultivation methods to grow vegetables and the supply is not satisfactory to meet the demand. The cost of production is high (for regular farming), therefore it cannot attract capital." He said.

The main reasons he cited was the labor cost and the yield is not as high as conventional chemically based agriculture.

"Aquaponics does it better," he said, "because it uses less space, less labor and produces a lot of yield."

A lot of people are concerned about food safety problems and food purity issues of food grown in China. The rising middle class demand cleaner vegetables and are prepared to pay the higher prices that Aquaponics grown produce commands.

Leo says he sees great potential in aquaponics reaching a broader Chinese market at a price where everyone can afford to buy organic produce.





Course Graduates



Arvind Venkat, is the founder of WaterFarmers Aquaponics, a pioneering professional Aquaponic system design consulting group, which is dedicated to providing turnkey solutions for Aquaponics as a sustainable food production system around the world.

A graduate of Murray Hallam's aquaponics courses, Arvind has gone on to build commercial systems in Canada, India, Oman, Bahrain and Hong Kong. "We have about 12 farms so far," he said, "and we're planning our thirteenth now." "We've done hybrid systems, media beds, floating raft, deep water culture, wicking beds and we're trying out verticals as well."

When asked about jobs in Aquaponics, Arvind says there is a strong future for good designers in Aquaponics. "Its not an easy lifestyle." He says, "There's a lot of traveling that goes with it. A lot of hard work and a lot of team work."

Arvind has about 12 people dispersed around the world that consult with his company designing Aquaponics systems. "Back home in Canada we have a group of four people."

"Together, we've managed to come up with this business model that can really cut it." He said. "I would encourage anyone that wants to take this on because we need more people who are designing good systems around the world."

"But I strongly, suggest that people first build their own farms, build their own systems first, develop themselves up in scale. Don't go out there and start developing a ten acre farm right off the back."

"We've built R & D systems and we've run them for four to six years before we've committed to anything commercial and we still R & D to get the answers into the future." He said.



Course Graduates



MannaBox partners Taebyong Jeon and CEO Aaron Park

Back in 2014, two young Korean students, Aaron Park an industrial design student and his friend and business partner Taebyong Jeon attended one of Murray Hallam's Aquaponics courses held on his farm in Brisbane Australia. They had already experimented with Aquaponics in their parents basement but wanted to learn more.

In class they were both polite but very quiet asking only a few questions. Murray Hallam was worried that they did not sufficiently understand his Australian accent.

He needn't have worried because within three years, both partners had taken the Aquaponics concept and spread it over six large greenhouses in central Korea building a brand known as MannaBox CEA.

With an Internet user base of over 10,000 subscribers to their lettuce in a box system, they quickly established a turnover of over \$1.2 Million US dollars per month! Growing over 40 different vegetables they quickly diversified into boutique pesto in a bottle sauce mixes, relishes as well as other ideas like packaging Kale for the home juicer market. The company has grown and employs over 60 full time staff and have a modern dining kitchen that feeds all staff very healthy and nutritious meals.

Different greenhouses are used to grow different produce. They have a greenhouse that only grows Kale based on wicking beds fed by fish waste. There is also a special nursery seedling greenhouse. The partners are also looking at growing eels as an exotic delicacy for the Korean market rather than low end value fish.

Korea would not be without automated electrical innovations that keep the greenhouse at a stable temperature over winter when temperatures can plummet to minus 20 degrees centigrade. The glasshouse have a bevy of triple layered shade cloth that automatically traps heat in over winter as well as automatically venting the enclosure over summer. Ironically the large volume of water always in play helps keep the farm stable over the changing seasons.

Because South Korea imports close to 90% of it's food requirements, MannaBox have seen remarkable expansion in their company growth. So much so that young people from the cities have gone back to farming in the rural area of Lwol-Myeon where their aquaponics farms are now based.

CEO Aaron Park explained that its not unusual to see growth in demand of 19% each month.



Example of Student Designs

An Aquaponics Course is only as good as the students it produces. Here are some examples from our 2106 Online course student submissions.

Assessing designs is always a treat for Murray Hallam to ensure that students have understood the course and are confident in designing their own systems.

You don't have to be proficient in expensive CAD drawing or architectural visualization software. A simple pencil and paper sketch is sufficient for assessment that demonstrates your understanding of water flows and system design.



An initial student mind-map is designed to get your creative juices flowing.



A student design using Google Sketch-Up software.



A student design pencil sketch for a large home system.



A student design for a Hong Kong Hi-Rise apartment.



A more elaborate student design.

As a professional educator (and head of evaluation and research for a 100-year-old non-profit education group in the US), I was quite impressed with Murray's teaching style. His pacing, presentation and camera management was excellent and the length of his modules was perfect - especially for adult learners.

- Joe Thomas, Colorado USA

Like our Facebook Page

Visit our Aquaponics Design Course page on Facebook and read all the positive comments. Like out page to stay up to date with the latest course developments at <u>https://www.facebook.com/AquaponicsDesign/</u>





An aquaponics student's design submission for a commercial aquaponics farm .



By far the most professional and well- structured course I personally have ever done online. Not just about Aquaponics. Thankyou !! - Karel Jan Fourie. Malaysia (Sabah)

Yes! Sign me up! I'm ready to Begin!

Ready to Start?

Because this is an interactive course, we are only taking limited numbers of students. Students are taught by Murray Hallam in a *6-Week Aquaponics Design Course* that has a number of weekly video lessons that will teach you the basics of design, right up to mid-system and beyond to full dynamic commercial aquaponics system.

Is this an Evergreen Course?

No. You are encouraged to ask questions and interact with Murray Hallam after each video lesson. Common questions will be answered Online with weekly conference calls where questions can be answered in a live seminar.

What is the price of the Course? US \$997

When does the Course start?

Registrations start on Sunday 2nd July, 2017. The course will end on 20th Ausgust, 2017. You will have an additional 4 weeks to submit your design for certification by 20th September 2017

Where do I sign-up?

A admission form will appear with a video explaining the course on Sunday 2nd July on the following site

www.aquaponicsdesigncourse.com

Need Help?

Go ahead! Ask our support staff a question! support@aquaponicsdesigncourse.net

Bank Information

We recommend you notify your bank that you are going to make a payment to the Aquaponics Design Course as we are located in Australia.

We use Stripe and Paypal to receive your payment, so your account details are always safe and secure.



Murray Hallam's Aquaponics Design Course

* *	6 x Week Aquaponics Design Course Aquaponics for Beginners Mid System Design Commercial Aquaponics Design Aquaponics Triple Pack DVDs Aquaponics Made Easy Aquaponics Secrets	\$1495 \$120-
~ ~ ~	UlY Aquaponics Weekly Conference Calls Indy 11.5 Plan Set Weekly Course RREs	Included _\$197- Included
✓ ✓	Design Assessment Certification	Included Included Included
✓ ✓	Commercial Aquaponics Financial Spreadsheets Access to over 100 instructional video lessons	Included Included

Registration opens 2nd July 2017

\$997

for 1 week only with limited places. course runs from 2nd July- 20th August 2017



Murray is a fantastic teacher and world class expert who is unparalleled in his field. - JD Messinger. USA "Thank you, Murray, for your selfless sharing of all things related to aquaponics. Keep up the great work! " - Han Ong, Singapore

Learn Aquaponics 6 Week Online Course with Murray Hallam

> "An excellent course. Dense and comprehensive, but delivered in an engaging and accessible way. Very good value!" - Craig Thorburn, Australia

> > "I would recommend anyone interested in aquaponics to do this course. Very informative." - Justin Mahy

Home, Small Farm to Commercial Systems

- 🛷 Aquaponics Basics
- 🛷 Small System Design
- 💋 6 Week Course
- 🥪 Money Back Guarantee
- 🕗 Small Farm Design
- 🥑 Weekly Live Webinars
- 🍼 Fish Management
- 🕗 Plant Management
- Mid Systems For Profit
 Feeding a Family of Four
 Plumbing Parts Explained
 4 Kits Plans you can Build
 Indy 11.5 Design
 FloMedia Design
 - Solving Plant Deficiencies
- 🕗 Dynamic Video Lessons

- 🔊 Commercial Aquaponics
- Aquaponics Certification
- 🗸 Case Studies
- 🗸 Over 100 Video Lessons
- 🖉 Flow Rate Calculators
- 🧭 Weekly Course PDFs
- 🗸 Design Assessment
- Personal Feedback

Murray Hallam is the leader in Aquaponics education. He has conducted Aquaponics Design Courses right around the world. Now for the first time, he is Online in a special Aquaponics event to teach you how to design and build your own profitable system for home, community and commercial systems. Murray's students have gone on to build amazing Aquaponics systems in Hong Kong, Oman, China and Canada.

<u>2nd July - 20th August 2017</u>

designcours

Murray Hallam's

Aquanonics Design Course