

Use of Stable Isotopes & Fatty Acids in Aquatic Ecology: Theory & Practice. Course 9 – 14 January 2017

Date	AM Activity	PM Activity
Sunday 8 January	Travel to Antofagasta	19:00 Welcome and ice breaker (Instituto de Antofagasta)
Monday 9 January	<p>9:00 Introduction to course & speakers. Introduction to Journal club –outline of mini-group project</p> <p>9:30 Introduction to course delegates (short presentation of 5 minutes per person)</p> <p>10:30 Lecture 1: Theory of stable isotope analysis</p>	<p>12:00 - 13:00 Lunch</p> <p>13:00 - 18:00 Data practical 1: Preparation of stable isotope data for analysis</p> <p>Laboratory practical 1: Sample collection and preparation.</p> <p>Coffee break 15:30 - 16:00</p>
Tuesday 10 January	<p>9:00 Lecture 2: Biogeochemical and geographical drivers of isotopic variation</p> <p>10:30 Lecture 3: Individual drivers of isotopic variation</p>	<p>12:00 - 13:00 Lunch</p> <p>13:00 Data practical 2: Statistical analysis of isotopic variation between individuals and groups</p> <p>15:30 - 16:00 Coffee break</p> <p>16:00 - 18:00 Data Practical 3: Going from isotope data to ecological information 1 (estimating isotopic niche)</p>
Wednesday 11 January	<p>9:00 Lecture 4: Using stable isotopes to understand consumer diet and habitat use I</p> <p>10:30 Lecture 5: Using stable isotopes to understand consumer diet and habitat use II</p>	<p>12:00 - 13:00 Lunch</p> <p>13:00 Data Practical 4: Going from isotope data to ecological information 2 (estimating trophic position)</p> <p>15:30 - 16:00 Coffee break</p> <p>16:00 - 18:00 Data Practical 5: Simple isotope mixing models</p>

Date	AM Activity	PM Activity
Thursday 12 January	<p>9:00 Lecture 6: Theory of fatty acid analysis</p> <p>10:30 Lecture 7: Using fatty acids to understand consumer diet and habitat use</p>	<p>12:00 - 13:00 Lunch</p> <p>13:00 Data Practical 6: Fatty acid data – handling and preparing for analysis</p> <p>15:30 - 16:00 Coffee break</p> <p>16:00 - 18:00 Data Practical 7: Multivariate analysis of fatty acid data</p>
Friday 13 January	<p>9:00 Lecture 8: Putting it all together – tips (and pitfalls) for writing an isotope ecology paper</p> <p>10:00 Journal Club: IsoGroup presentations – Groups present their critical reviews of key isotope ecology papers</p>	<p>12:00 - 13:00 Lunch</p> <p>13:00 Data Practical 8: More complex isotope mixing models: MixSIAR</p> <p>15:30 - 16:00 Coffee break</p> <p>16:00 - 18:00 Data Practical 9: Combined analysis of isotope and fatty acid data</p>
Saturday 14 January	<p>9:00 Show us your data: interactive workshop on student isotope & fatty acid data</p>	<p>12:00 - 13:00 Lunch</p> <p>13:00 Show us your data 2: interactive workshop on student isotope & fatty acid data</p> <p>15:30 - 16:00 Coffee break</p> <p>18:00 Course ends!</p>